

BRIDGING THE ACHIEVEMENT GAP:  
LEARNING FROM THREE CHARTER SCHOOLS

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Date MAY 16 2008

Submitted in partial fulfillment of the requirements for the Degree of Doctor of  
Education in Teachers College, Columbia University

2008

UMI Number: 3327127

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# BRIDGING THE ACHIEVEMENT GAP: LEARNING FROM THREE CHARTER SCHOOLS

John B. King

This dissertation examines how three successful urban charter schools are using key elements of charter school autonomy – budgets, staffing, curriculum and instruction, and school culture – to bridge the achievement gap between African-American and White students. The research design rests on four assumptions: (1) Schools have the capacity to be effective in bridging the achievement gap; (2) Standardized test scores provide a useful measure of the effectiveness of individual schools in bridging the achievement gap; (3) As a result of their autonomy – defined as freedom plus accountability – charter schools are uniquely positioned (i.e., differently positioned than district schools) to implement effective practices; (4) Decisions about budgets, staffing, curriculum and instruction, and school culture contribute to the effectiveness of three urban charter schools in bridging the achievement gap.

Case studies are constructed from published documents, interviews with school leaders, and focus groups with teachers, parents, trustees, and students, using four research questions: (1) How, if at all, do these schools allocate their resources to advance student achievement? (2) How, if at all, do these schools recruit, support, evaluate, and retain school staff to advance student achievement? (3) How, if at all, do these schools develop, assess, and refine their curricula to advance student achievement? (4) How, if at

all, does each of these schools cultivate and sustain a student, parent, and staff culture to advance student achievement?

A cross-case analysis reveals that while individual practices vary significantly, a common set of hypotheses about the culture necessary to bridge the achievement gap drives decision-making: (1) a culture that teaches that effort yields success; (2) a culture of high expectations that shapes student beliefs; (3) a disciplined culture that yields a physically and emotionally safe context for learning; (4) a culture built on relationships that yield trust; and (5) a culture of excellence in teaching that challenges and inspires.

The dissertation discusses implications for practice and policy, and calls for further research into life within high-performing charters, the differences between high-performing charters and other schools serving similar populations, and the role of school leaders in fostering the cultures within high-performing charters.

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## I -- INTRODUCTION

### Overview of the Problem

In 1954, when the Supreme Court declared segregation in public schools unconstitutional in *Brown v. Board of Education*, the Court's decision was viewed not only as a major victory in the struggle against legally mandated segregation, but as a critical step toward equal educational opportunity. Yet fifty years later most political and educational leaders acknowledge that equal educational opportunity for African-Americans has not been realized. Although the disparity in academic achievement between Black students and White students was cut by nearly half during the 1970s and 1980s, a dramatic racial achievement gap persists (Haycock, 2001). Jencks and Phillips (1998) gloomily report, "African-Americans currently score lower than European Americans on vocabulary, reading, and mathematics tests, as well as on tests that claim to measure scholastic aptitude and intelligence.... [T]he typical American black still scores below 75 percent of American whites on most standardized tests" (p. 1). Recently, on the 2005 National Assessment of Education Progress (NAEP), fifty-nine percent of African-American students scored below basic (the lowest performance level) on the 8<sup>th</sup> grade mathematics exam versus only 21% of White students (Haycock, 2007, p. 3). This academic achievement gap contributes to similar racial gaps in educational attainment, employment, and family income, and its persistence has led to calls for increasingly radical educational experiments. One such experiment is the charter schools movement.

Sarason (1998) describes charter schools as, “the most radical education reform effort in the post World War II era in that states encourage and permit these schools to be created exempt from burdensome, stifling, innovation-killing features of the culture of existing systems” (p. vii). Charter schools constitute a dramatic departure from traditional educational practices because, in exchange for greater accountability, charter schools are granted substantially more freedom than traditional district schools – although the level of new freedom varies from state to state. Today, there are over 3,900 charter schools in 40 states and the District of Columbia, enrolling over one million students (Center for Education Reform, 2007).

Essentially, charters function as contracts between charter schools and the charter-granting agency, typically the state department of education and/or local district. In their charter proposals, the schools define the academic goals they hope to achieve and outline the policies and procedures they plan to implement to accomplish those goals. Charter-granting agencies review each proposal and select the most promising proposals for implementation. Periodically – usually every three to seven years – the charter-granting agency reviews how successfully each charter school is meeting the terms of its charter. Failing schools may be discontinued through revocation of their charters, or may close their doors voluntarily due to a lack of either student enrollment or financial viability, while those that are succeeding have their charters renewed. It is important to note that charter schools are required to operate within the significant constraints imposed by state standards, state assessment systems, and federal laws regarding Title I, special education, and civil rights (Heubert, 1997). However, even as Massachusetts and the nation embrace uniformity of ends (through state-wide standards and assessments and the

mandates of the 2001 No Child Left Behind Act), Massachusetts charter schools enjoy considerable autonomy with regard to means: (1) autonomy in designing and implementing the school's curriculum and instructional practices, (2) autonomy in hiring, managing, evaluating, and, when necessary, firing school personnel, (3) autonomy in developing the school budget, and (4) autonomy in establishing and maintaining the school culture (see MGL Chapter 71 § 89, 1993).

Despite enthusiasm among politicians, parents, and educators for expanding the charter school movement, there is limited available research on effective urban charter school practice. Most research to date on charter schools has focused on determining whether these schools as a whole are living up to the promises made by their advocates and whether they are outperforming district schools (American Federation of Teachers, 2002; Bifulco & Ladd, 2004; Finn, Manno, & Vanourek, 2000; Gill et al., 2001; Hoxby, 2004; Loveless; 2003; Massachusetts Department of Education, 2006; Miron, 2005; Miron & Nelson, 2001; Miron, Wygant, Cullen, & Applegate, 2006; SRI International, 1997; UCLA, 1998; Zimmer & Buddin, 2005). While proponents point to promising early indications of success, critics, such as American Federation of Teachers (2002) and Good and Braden (2000), focus on studies that show that charter schools do not consistently outperform their district counterparts or assert that charter schools enroll disproportionately fewer high-need students. A recent study prepared for the U.S. Department of Education's National Center for Education Statistics by Braun, Jenkins, & Grigg (2006) used hierarchical linear modeling to analyze fourth grade student performance data from the 2003 National Assessment of Educational Progress (NAEP). According to Braun, Jenkins, and Grigg, after controlling for student characteristics,

charter school students' mean fourth grade performance was lower than the performance of public district schools' students in both reading and mathematics. Similarly, Lubienski and Lubienski's (2006) study of student performance data from the 2003 National Assessment of Educational Progress (NAEP) mathematics exam found that nationally, after controlling for student demographics, students enrolled in charter schools outperformed students in non-charter district schools by 2.4 points on the 8<sup>th</sup> grade NAEP mathematics exam (which was not statistically significant), but scored 4.4 points lower than non-charter public schools on the 4<sup>th</sup> grade NAEP (which was statistically significant) (p. 4). Lubienski and Lubienski (2006) rely on this finding to challenge the claim of school choice advocates that private organizational models in education will yield superior student achievement. However, both Braun, Jenkins, and Grigg's and Lubienski and Lubienski's findings and methodology were subsequently challenged by Peterson and Llaudet (2006). Despite this debate within the education research and policy communities, the political reality is that the charter school movement has maintained substantial momentum over the past decade, particularly among urban parents of color, and will likely involve increasing numbers of urban students (Reid, 2001). Therefore, there is a critical need for mixed-method research on the internal workings of urban charter schools to explore the relationship between charter status and student outcomes. In particular, given the national concern about the black-white achievement gap and the under-representation of African-Americans in higher education, education researchers must focus on what is being done in those charter schools that are succeeding in bridging the achievement gap for low-income African-American students.

## Hypothesis and Research Questions

This dissertation seeks to examine whether and how three successful urban charter schools, Academy of the Pacific Rim Charter School (APR), Neighborhood House Charter School (NHCS), and Roxbury Preparatory Charter School (RPC), are using key elements of charter school autonomy – budgets, staffing, curriculum and instruction, and school culture – to bridge<sup>1</sup> the achievement gap between African-American students and white students. This goal and the resulting research questions must be understood in the context of what this dissertation does *not* seek to do. This dissertation does not seek to generate a list of best practices that will guarantee higher student achievement. Nor will this dissertation seek to prove that charter schools are inherently superior to district schools in their capacity to bridge the achievement gap. No attempt will be made in this dissertation to assert that the behavior of the schools alone produced their students' academic success. Indeed, selection bias (as a result of requiring parental applications) must be acknowledged as a element in their impressive results – although admission by lottery, required under Massachusetts law (MGL Chapter 71 § 89, 1993), and the possibility that some parents whose children have struggled in traditional district schools may be attracted by positive publicity mitigate against this

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<sup>1</sup> The use of the phrase “bridge the achievement gap” reflects the assessment data presented in Chapter 3 – raw data on the percentage of students scoring proficient or advanced on the MCAS in ELA and Math – which demonstrates that African-American students in the three case study schools have either narrowed the gap (to varying degrees) between their performance and the state's White students in comparison to the gap for African-American students in Boston Public Schools or across the state, closed the gap and are performing at the same level as White students state-wide, or achieved superior performance to White students state-wide. However, it is important to recognize that although the schools in this study have been recognized as high-performing by the state (via the charter renewal process), charter support organizations, foundations, and the media based on the raw data in Chapter 3, these results do not constitute a controlled study. The raw scores are comparatively higher by a significant margin, but publicly available data do not make it possible to make the statistically significant claims that would be possible through a controlled and/or randomized study.

factor. Finally, this dissertation does not offer the three charter schools as the pinnacle of what is possible in public education, for these schools – like all organizations – have their fair share of struggles and weaknesses. Instead, this dissertation has a more modest ambition: to use the literature on educational practices effective in bridging the achievement gap and the literature on charter schools as a framework for telling and analyzing three important stories – the stories of life within three urban charter schools that are bridging the achievement gap.

Four central school-level research questions drive the case studies of the three successful charter schools and analysis of their institutional experiences:

- Budgets: How, if at all, do these *schools* allocate their resources to advance student achievement?
- Staffing: How, if at all, do these *schools* recruit, support, evaluate, and retain school staff to advance student achievement?
- Curriculum and Instruction: How, if at all, do these *schools* develop, assess, and refine their curricula to advance student achievement?
- School Culture: How, if at all, does each of these *schools* cultivate and sustain a student, parent, and staff culture to advance student achievement?

The remainder of this Introduction, Chapter 1, introduces the relevant literature, critical assumptions, and methodology for this dissertation as well as the significance of potential findings. The Literature Review, Chapter 2, explores in detail the effective schools literature, the critique of the effective schools literature, recent literature on educational practices effective in bridging the achievement gap and the literature on charter schools to provide the theory with which the experience of the three schools can

be compared and contrasted. In essence, these bodies of literature purport to identify school features associated with higher levels of achievement for low-income urban students and/or students of color. This dissertation compares and contrasts the experiences of the three schools with the claims in the effective schools literature, the critique of the effective schools literature, recent literature on educational practices effective in bridging the achievement gap and the literature on charter schools. In Chapter 3, the Methodology chapter, the rationale for the research strategies employed in this dissertation is explained and a detailed description of the process for data collection is offered. Chapter 4 is comprised of case studies that describe in detail how Academy of the Pacific Rim Charter School (APR), Neighborhood House Charter School (NHCS), and Roxbury Preparatory Charter School (RPC) are using their autonomy with respect to budgets, staffing, curriculum and instruction, and school culture. Chapter 5 provides analysis, informed by the literature discussed in Chapter 2, of themes, patterns, and contradictions in the experiences of these schools. Chapter 6, the Conclusion chapter, addresses implications for practice and potential areas for future research.

### Relevant Literature and Critical Assumptions

#### Effective Schools, School Culture, and Achievement Gap Research

Although charter schools are relatively new to the education research landscape, concern about the achievement gap is not. In fact, an entire body of literature, published primarily during the 1970s and 1980s, focused on identifying and describing schools

effective in raising the achievement of urban students of color. This literature, known as effective schools research, began in response to two major studies in the mid-1960s, the Coleman Report (1966) and a subsequent study entitled Inequality: A Reassessment of the Effect of Family and Schooling in America (Jencks et al., 1972), both of which suggest that family background has a significantly greater effect on academic achievement than do schools. Effective schools researchers (such as Brookover et al., 1979; Coleman et al., 1981; Edmonds, 1979, 1986; Phi Delta Kappa, 1980; Rutter et al., 1979; Weber, 1971), used outlier studies, case studies, program evaluations, and surveys to explore the practices of schools whose performance on standardized tests was significantly higher than would be predicted by student demographics (Firestone, 1991b). Despite serious methodological flaws and numerous unsuccessful attempts at replication of practices identified as effective, this research demonstrated that individual schools can succeed in bridging the achievement gap between African-American students and white students.

Although their observations and conclusions differed in some areas, a consensus emerged among effective schools researchers about the practices of effective schools. Frequently occurring items on the list of effective practices were: a focus on core literacy and math skills, strong principal leadership, a disciplined school environment, and high expectations for students throughout the school community (Brookover et al., 1979; Edmonds, 1979, 1986; Phi Delta Kappa, 1980; Weber, 1971). Many resulting effective schools initiatives, including federal, state, and district programs as well as individual school change efforts, embraced these lists as formulas for effective school reform. This approach was challenged by a critique of the effective schools movement that emerged in

the 1980s and 1990s, questioning whether lists of effective characteristics adequately address issues of school organization and culture (Cuban, 1983; Firestone, 1991a; Purkey & Smith, 1983; Rosenholtz, 1985; Rowan, Bossert, & Dwyer, 1983). For example, Purkey and Smith (1983) challenge the effective schools literature as “weak in many respects, most notably in its tendency to present narrow, often simplistic recipes for school improvement” (p. 427). This skepticism led to a shift away from descriptions of school characteristics toward a more thorough exploration of school culture in effective schools, what Purkey and Smith called the “structure, process, and climate of values and norms that emphasize successful teaching and learning” (p. 442). As a result, Purkey and Smith (1983), Deal and Kennedy (1983), Rosenholtz (1985), and subsequent researchers interested in issues of school culture began to focus not only on what effective schools do, but also on how they do it.

Recent research focused on identifying how particular schools are effective in raising student achievement, particularly the achievement of students in urban schools, has identified a variety of practices in the areas of budgets, staffing, curriculum and instruction, and school culture associated with improved educational outcomes. In analyzing the relationship between school budgets and student achievements, researchers identify smaller schools and smaller classes, reduced teacher loads that provide time for data analysis and reflection, professional development carefully coordinated with curricular and instructional reforms, and programs that increase student learning time and expand student access to academic tutoring as crucial investments (Darling-Hammond, 1997; Elmore, 2002; Finn & Achilles, 1999; Heath & McLaughlin, 1994; Miles, 2001; Newmann et al., 2001). Current scholarship emphasizes the role of staffing in school

success and advocates measures such as: hiring teachers who have high expectations for students, a thorough understanding of instructional methods, and content expertise; creating dynamic roles and consistent learning opportunities for teachers that ensure their continued professional growth and encourage their persistence in the field; removing or “counseling-out” teachers who fail to advance student achievement; and hiring and/or developing school leaders who prioritize instructional leadership and the creation of collaborative staff cultures (Elmore, 1995; Darling-Hammond & Falk, 1997; Dreeben & Gamoran, 1986; Ferguson, 1998b; Fullan, 2002; King & Newmann, 2000; Sebring & Bryk, 2000).

In terms of curriculum and instruction, recent research links to improved academic results several critical features: structures that support teaching for understanding and differentiated instruction, instructional coherence, continuous use of student performance data to drive instructional improvements, internal assessment systems designed to yield rich data on student knowledge and skills, and culturally-responsive curricula (Elmore, 1995, 2002; Newmann et al., 2001; Ogbu & Simons, 1998; Shepard, 2000; Steele, 1992; Steele & Aronson, 1998). School culture is an area of particular interest for researchers focused on the achievement gap, and they offer several cultural elements that facilitate the bridging of the achievement gap including structures that support the development of trusting relationships between students and school staff, academic and social interventions that directly address the tension between the cultural experience of institutional oppression and/or discrimination and the goal of success within educational institutions, cultivation of safe, academically rigorous, and respectful environments, and trust-building home-school communication (Bryk & Schneider, 2002;

Darling-Hammond & Falk, 1997; Hill, Foster, & Gendler, 1990; Ogbu & Simons, 1998; Steele, 1992). Without question, the blueprint offered by recent scholarship in education for the creation of schools effective in bridging the achievement gap requires changes in educational practice significantly more complex and organic than those proposed by the early effective schools researchers.

### Charter School Research

Neither the prescriptions of effective schools researchers nor the reform proposals of subsequent researchers focused on educational practices effective in bridging the achievement gap have yielded the desired transformation in educational outcomes. Many policymakers, including those who championed charter schools legislation in Massachusetts, have blamed the failure of these reform initiatives to achieve wholesale change on intractable structural challenges (such as inefficient school district bureaucracies, teachers and administrators immune as a result of union contracts from accountability for results, etc.) (Hassel, 1999; Jacoby, 1994; Wilson, 1992). As a result, a shift in the national debate on education occurred in the late 1980s and early 1990s toward an examination of structural obstacles to school improvement. School-based management, schools-within-schools, and school vouchers were all part of late 1980s and early 1990s education reform. In this context, education policymakers began to explore the idea of creating new schools -- charter schools -- that would be free from many (although certainly not all) of the constraints of existing school systems, but accountable for producing the achievement gains long sought by the effective schools movement.

Nathan (1999), Finn, Manno, and Vanourek (2000), and other charter school advocates reference the effective schools literature in making the case for charter schools' capacity to overcome structural obstacles to school reform. For example, Finn, Manno, and Vanourek (2000) argue in the tradition of effective schools researchers, "Effective schools, it turned out, have certain predictable (and commonsensical) features....," and then add a new criterion, "[M]ost have also wrested a measure of autonomy from the system and have carved out a zone within which they can shape their own destinies" (p. 63). Thus, charter school proponents offer the autonomy of charter schools -- school-level freedom with school-level accountability -- as a path to widespread adoption of effective practices that have been difficult for traditional public schools to implement within the confines of the existing system.

Evidence on whether the claims of charter school enthusiasts have been borne out over the past fifteen years is mixed. National and state studies, with large sample sizes across diverse regions, have produced conflicting results – both in terms of whether charter schools are meeting the promise of out-performing district schools and whether charter schools are serving the same proportions of high-need students (i.e., low-income students, special education, limited English proficiency, etc.) as traditional district schools (American Federation of Teachers, 2002; Bifulco & Ladd, 2004; Braun, Jenkins, & Grigg (2006); Finn, Manno, & Vanourek, 2000; Gill et al., 2001; Hoxby, 2004; Loveless; 2003; Lubienski & Lubienski, 2006; Massachusetts Department of Education, 2006; Miron, 2005; Miron & Nelson, 2001; Miron, Wygant, Cullen, & Applegate, 2006; SRI International, 1997; UCLA, 1998; Zimmer & Budin, 2005). For example, Miron and Nelson (2001), in a meta-analysis of state-wide studies of charter schools conducted since

passage of the first charter school law in 1991, found that “the existing body of research on charter schools’ impact on student achievement reveals a mixed picture, with studies from some states suggesting positive impacts, studies from other states suggesting negative impacts, and some providing evidence of both positive and negative impacts” (p. 30). More in-depth studies of life within charter schools have tended to profile pitfalls and missteps that have led individual schools to fail in their pursuit of higher student achievement (Good & Braden, 2000; Fuller, 2000a; Sarason, 1998). However, even charter school critics acknowledge the existence of individual charter schools with impressively strong academic results. Thus, what is missing from the existing literature is careful exploration of what successful charter schools, particularly those serving low-income students of color, are doing effectively.

Because charter schools offer the powerful opportunity to examine what is possible when schools are granted greater autonomy than traditional district schools to implement effective practices, there is perhaps no more urgent education research needed than a better understanding of the behavior of charter schools that are succeeding in bridging the achievement gap. Explaining this new direction for charter school research, education researcher Paul Hill told *Education Week*, “We’re moving away from the black-box questions to questions about what kind of instruction goes on in charter schools... Is it coherent? Does it increase opportunities for kids, and, then, under what circumstances do these things happen?” (Viadero, 2001, p. 6). Examining life within successful charter schools will allow education researchers to explore if, and how, these schools are putting into practice the ideas advanced by current research on educational practices effective in bridging the achievement gap (e.g., Darling-Hammond, 1997;

Elmore, 2002; Ferguson; 1998; Fullan, 2002; Miles, 2001; Newmann et al., 2001; Ogbu & Simons, 1998; Sebring & Bryk, 2000; Shepard, 2000). Descriptions of the behavior of these schools will help educators and policymakers to determine the extent to which the autonomy – defined as freedom with accountability – celebrated by charter school proponents is helping these schools to bridge the achievement gap. In addition, traditional district schools may be able to learn from such research ways they might grant greater flexibility in certain areas to promote best practices. Finally, the stories of successful charter schools can offer, not a recipe, but rather a resource for charter school founders, leaders, teachers, and parents as they seek to provide better educational opportunities for urban students of color.

### Methodology

The schools to be studied, Academy of the Pacific Rim Charter School (APR), Neighborhood House Charter School (NHCS), and Roxbury Preparatory Charter School (RPC), were selected both because of their impressive record of student achievement and the substantial public recognition they have received. It is important to note that the principal indicator of student achievement used in selecting these schools, and responsible for attracting much of their notoriety, was the Massachusetts Comprehensive Assessment System (MCAS). APR, NHCS, and RPC African-American students have scored Proficient or Advanced at rates on the 7<sup>th</sup> and 8<sup>th</sup> grade Mathematics and English Language Arts exams that are significantly higher than African-American students in Boston Public Schools and across Massachusetts (See Chapter 3 for more detail). In fact,

across the ten ELA and Math MCAS tests administered in 7<sup>th</sup> and 8<sup>th</sup> grade in 2005, 2006, and 2007, APR, NHCS, and RPC African-American students have narrowed or eliminated the gap in performance between African-American students and White students state-wide, and in some cases are outperforming White students state-wide. In Massachusetts, the MCAS is a set of tests given throughout students' educational careers to assess their progress in English, Math, Science, and Social Studies. While such exams are controversial, their appeal as a cost-effective accountability mechanism is undeniable, as evidenced by the bipartisan support in 2001 for the federal *No Child Left Behind Act* that relies almost exclusively on statewide pencil and paper assessments to measure student achievement. Moreover, the practical significance of student performance on exams like the MCAS is undeniable, given the use of these exams as graduation requirements. In order to receive a high school diploma in Massachusetts, students must pass the 10<sup>th</sup> grade English and Math MCAS exams. The fact that African-American students in these three charter schools are achieving at levels dramatically higher than their racial peers in Boston and Massachusetts (based on raw test scores) demands exploration (See Tables 3.1a, 3.1b, 3.1c, and 3.1d). Likewise, the fact that African-American students in these three schools are achieving on many of the tests at levels near, commensurate, or superior to White students statewide (based on raw test scores) demands intensive study.

To study these three charter schools, this dissertation relies on case study methodology. Data was collected on each school from a variety of sources including published documents, interviews, and focus groups. The published documents included the schools' charters, annual reports, Massachusetts Department of Education site visit

reports, and charter renewal documents. A set of standard open-ended questions with interviewer-crafted follow-up questions was used to interview the school leaders. A second set of open-ended questions was used to guide trustee, teacher, parent, and – in the case of Roxbury Prep – student focus groups. Much of the data collected is qualitative to allow for a rich description of what takes place within each school, particularly the interaction of the four key elements under study: budgets, staffing, curriculum and instruction, and school culture. However, limited quantitative data (e.g., school budgets, class size, etc.) adds detail to these descriptions and helps to facilitate cross-school comparisons, including very limited comparisons with traditional district schools.

The case studies are primarily descriptive and are organized around the four research questions. Each case study details how each of the schools is using its autonomy in the areas of budgets, staffing, curriculum and instruction, and school culture to advance student achievement. The case studies seek to capture critical nuances in how each school community conceptualizes its efforts to bridge the achievement gap. The analysis chapter uses the literature on educational practices effective in bridging the achievement gap and the charter schools literature to analyze trends, patterns, and even surprises, in the case studies. The structure of the analysis chapter differs from the case studies in that it looks at themes revealed in the case studies that cut across the categories of budgets, staffing, curriculum and instruction, and school culture. The conclusion chapter explores lessons from the experiences of Roxbury Prep, Neighborhood House, and Academy of the Pacific Rim for practitioners, policymakers, and researchers.

### Significance

In a 1999 *Education Week* editorial, Hugh Price, Executive Director of the National Urban League, urges the nation to “‘charterize’ all urban schools.” In support of this proposal, Price (1999) argues that, “For the sake of public education and, above all, for the sake of the children, what’s urgently needed is truly radical reform that structures public education so that its *raison d’etre* is student success” (p. 44). Price sees hope for public education in the freedom and accountability promised by the charter school movement. Although Price’s grand vision does not seem likely to be realized in the near future, the charter school movement is a phenomenon growing in both size and permanence. Comments made in 2002 by former Boston superintendent and charter school opponent Thomas Payzant exemplify this trend. Payzant told a gathering of Boston administrators, “Some of you may not like charter schools, but they’re not going away folks... The competition is real—for the resources and for the kids” (Szaniszlo, 2002, p. 15). Further evidence for this trend can be found in the comments of then newly appointed New York City schools chancellor Joel Klein, leader of the nation’s largest school system, who announced in fall 2002 that creating a more friendly and fertile environment for charter schools, an environment in which they “can feel supported and can thrive,” would be a hallmark of his administration (Goodnough, 2002, p. B3). More recently, Chancellor Klein has sought to emulate elements of the charter organizational model in the creation of district empowerment schools. The post-Hurricane Katrina rebuilding of the New Orleans schools is relying almost exclusively on charters –

creating in essence the first charter district. As charter schools – and even semi-autonomous district schools designed to mirror the freedom and accountability of charter schools – become a more permanent presence in urban education, it is essential to understand how successful charter schools are achieving positive student outcomes.

Moreover, given the presence of growing numbers of urban students of color in charter schools, these schools are becoming a critical tool for meeting the greatest challenge facing those seeking a more just society – equalizing educational opportunity (U.S. Department of Education, 2004). As Jencks and Phillips (1998) contend, “[I]f racial equality is America’s goal, reducing the black-white test score gap would probably do more to promote this goal than any other strategy that commands broad political support. Reducing the test score gap is probably both necessary and sufficient for substantially reducing racial inequality in educational attainment and earnings. Changes in education and earnings would in turn help reduce racial differences in crime, health, and family structure...” (p .3). If a more just society can be achieved through effective schooling, then understanding schools that work, specifically urban charter schools that are succeeding in bridging the achievement gap, is not only important, it is morally urgent.

## II -- REVIEW OF THE LITERATURE

### Introduction

This dissertation seeks to examine whether and how three urban charter schools are using key elements of charter school autonomy – budgets, staffing, curriculum and instruction, and school culture – to bridge the achievement gap between African-American students and white students. The behavior of the three charter schools will be explored using empirical evidence, generated through case studies, to evaluate existing theories in the literature on educational practices effective in bridging the achievement gap and the charter schools literature. The design of this research rests on four core assumptions:

- Assumption # 1: Schools have the capacity to be effective in bridging the achievement gap between African-American students and white students.
- Assumption # 2: Standardized test scores provide a useful measure of the effectiveness of individual schools in bridging the achievement gap between African-American students and white students.
- Assumption #3: As a result of their autonomy – defined as freedom plus accountability – charter schools are uniquely positioned (i.e., differently positioned than traditional district schools) to implement effective practices.
- Assumption #4: Decisions about budgets, staffing, curriculum and instruction, and school culture contribute to the effectiveness of three urban charter schools in

bridging the achievement gap between African-American students and white students.

This literature review chapter seeks to analyze how the relevant literature both supports and challenges these core assumptions which are the foundation for the four school-level research questions:

- Research Question # 1 – Budgets: How, if at all, do the case study schools allocate their resources to advance student achievement?
- Research Question # 2 – Staffing: How, if at all, do the case study schools recruit, support, evaluate, and retain school staff to advance student achievement?
- Research Question # 3 – Curriculum and Instruction: How, if at all, do the case study schools develop, assess, and refine their curricula to advance student achievement?
- Research Question # 4 – School Culture: How, if at all, do the case study schools cultivate and sustain a student, parent, and staff culture to advance student achievement?

Assumption # 1: Schools have the capacity to be effective in bridging the achievement gap between African-American students and white students

Over the past forty years, as the United States has grappled with the achievement gap between African-American students and white students, some have argued that the problem is beyond the capacity of individual schools to address. The most influential of these arguments were put forward in the 1966 Coleman Report and a subsequent study

entitled *Inequality: A Reassessment of the Effect of Family and Schooling in America* (Jencks et al., 1972), both of which essentially assert that school plays a less significant role in student achievement than family background.

The effective schools literature, a body of research published primarily during the 1970s and 1980s, sought to demonstrate that schools can in fact play a significant role in raising the academic achievement of urban students, particularly low-income urban students of color. Effective schools researchers identified and profiled schools where students were achieving at levels higher than would be predicted by their socioeconomic status in order to challenge the conclusions drawn by Coleman and Jencks (Firestone, 1991b). This literature is critical to this study in two respects: first, it provides compelling evidence that schools can succeed in bridging the achievement gap; and second, it provides a methodological precedent, albeit somewhat flawed, on which to build and expand in examining the practices of charter schools that are more successful than most traditional district schools and other charter schools in helping African-American students to achieve at high levels.

#### Early Challenges to Coleman and Jencks: Schools Matter

Often cited as the inaugural study of the effective schools movement, a study by Weber (1971) seeks to prove the hypothesis that “several inner-city public schools exist in the United States where reading achievement in the early grades is far higher than in most inner-city schools, specifically, at the national average or higher” (p. 2). Weber expresses an eagerness to challenge the conclusions drawn by Coleman, and to instead show that reading achievement in urban schools is more a function of education than of

family background. In addition, Weber hopes to “discover some common factors in the success of the good programs” (p. 2). Thus, Weber profiles four successful urban elementary schools in which students’ median reading achievement score meets or exceeds the national norm and where the gross failure rate is unusually low for inner-city schools. Each of these schools: (1) serves students from the central areas of large cities; (2) is a non-selective public school; (3) has a Title I designation; (4) enrolls a high percentage of students receiving Federal free or reduced price lunch. To collect data, Weber observed classroom reading instruction and remedial reading instruction, interviewed school staff members, including the principals, administrators, classroom teachers, and reading specialists, and, where appropriate, interviewed other support staff such as school psychologists and English as a Second Language teachers. Weber finds that the factors responsible for the success of these schools are “strong leadership, high expectations, good atmosphere, strong emphasis on reading, additional reading personnel, use of phonics, individualization, and careful evaluation of pupil progress” (p. 30).

Brookover, Beady, Flood, Sweitzer, and Wisenbaker (1979), like Weber (1971), seek to demonstrate the significant role schools can play in student achievement. Brookover et al. use a two-step research process. First, Brookover et al. study a random sample of Michigan elementary schools, using data from four sources: (1) state reports including Michigan Assessment Test score data, average teacher salaries, ratios of teachers to pupils in each school, and student demographic data; (2) questionnaires completed by 4<sup>th</sup>- and 5<sup>th</sup>-grade students; (3) questionnaires completed by 4<sup>th</sup>- and 5<sup>th</sup>-grade teachers; and (4) questionnaires completed by the school principals. Using regression analysis of this data, Brookover et al. conclude that, “SES and racial

composition alone do not adequately explain differences in achievement among elementary schools... Favorable climate is, we believe, a necessary condition for student achievement” (p. 80). Thus, in the second step of their research process, Brookover et al. use case studies to discover “the way in which a given [school] climate is developed and the way in which students, teachers, and principals become socialized in it” (p. 80). Using participant observation as well as student, teacher, and principal interviews, Brookover et al. profile two high-achieving elementary schools (one Black, one White) and two low-achieving elementary schools (one Black, one White) comprised of low socioeconomic status students. They find that successful schools exhibit staffs with high expectations for students regardless of their family backgrounds, focused classroom instruction free from disorder or wasted time, and appropriate reinforcement for achievement consistent with high expectations.

The educational researcher most closely associated with the effective schools movement is Ronald Edmonds. Edmonds (1979) rejects the views of Coleman et al. (1966) and Jencks et al. (1972) and argues “that all children are eminently educable and that the behavior of the school is critical in determining the quality of that education” (p. 20). In support of this thesis, Edmonds cites studies conducted by Weber (1971) and Brookover and Lezotte (1977) as well as his own research with the Search for Effective Schools Project in Michigan. Each of these studies, Edmonds (1979) argues, identifies schools in which students perform significantly above the level predicted by their socioeconomic status and/or family background. According to Edmonds (1979), the common features of these effective schools are: strong leadership, instructional focus on

basic skills, a safe and orderly school climate, high expectations for students, and frequent assessment of student progress.

Weber (1971), Brookover et al. (1979), and Edmonds (1979) offer strikingly similar descriptions of effective schools. Yet they offer little explanation of how the orderliness, academic focus, and high expectations for students that they celebrate are achieved. Similarly, although these studies emphasize strong leadership, they do not fully explore how that leadership is asserted with respect to each critical school constituency (e.g., teachers, parents). Understanding the success of charter schools that bridge the achievement gap requires more than an examination of the presence or absence of the characteristics described above. Rather, current researchers must also explore how these characteristics – to the extent they are present – are developed and sustained, and the ways in which they contribute to the schools' academic successes.

#### Searching for Key Educational Practices of Effective Schools

Building on the work of early effective schools researchers in the United States, Rutter, Maughan, Mortimore, Ouston, and Smith (1979) conducted a study of London schools with the goal of identifying differences in school effectiveness controlling for a variety of input factors including socioeconomic status, test scores at age 10, elementary school attendance records, and elementary school behavior as assessed by teachers. This study was significantly more elaborate than Weber's (1971), Brookover et al.'s (1979), and Edmonds's (1979), in that Rutter et al. used longitudinal data from 20 schools to establish the educational value-added by each of the schools studied.

Comparing indicators of educational performance (test scores, attendance, behavior) of students at ages 10 and 14, Rutter et al. concluded that the difference in student outcomes could not be explained by what the children were like at age 10. In fact, “schools with the most advantaged intakes were not necessarily those with the best outcomes. Furthermore, schools with very similar intakes sometimes had very different findings at fourteen” (p. 27). Thus, Rutter et al. chose a representative sample of twelve schools for in-depth study in hopes of identifying the school characteristics responsible for different student outcomes (behavior, attendance, test scores, employment, and delinquency) when controlling for intake factors (students’ scores on a test of verbal ability, parents’ occupation, and students school behavior as assessed by teachers). To gather data on “the overall characteristics of the school itself as an organization,” Rutter et al. conducted semi-structured interviews with staff members, administered a questionnaire to students, and made extensive observations of classes (p. 54). The researchers conclude that several factors are significant in effective schools: high academic expectations, focused instruction, collaborative planning, school-wide standards for conduct, incentives and rewards consistent with the school’s high expectations, and student responsibility.

Phi Delta Kappa (1980) draws lessons about effective education from a meta-analysis of district self-studies of urban elementary schools identified as exceptional by their districts because of steadily improving achievement test scores. The goal of the case studies was to “observe the changes in a set of independent variables in an elementary school, as the dependent variable...fluctuates in a single direction, that is, student achievement levels in a school are rising” (Phi Delta Kappa, 1980, p. 4). To

develop the case studies, the district teams used a combination of interviews and questionnaires administered to staff, students, and parents, observation, and published documents. The creators of the case studies “used the critical incidents technique to identify those events that seemed to determine the course of a school’s development” (p. 4). Once the district teams completed the case studies, Phi Delta Kappa research staff integrated them into a summary that seeks to infer lessons for effective schooling. Among the factors found to contribute to the success of the Phi Delta Kappa schools are: participatory decision making, principal selection of the staff, high expectations for staff and students, teacher collaboration, staff development initiatives focused on the school’s goals, commitment of resources to programs emphasizing basic skills and in-service training, parent involvement, and a focused atmosphere conducive to learning.

Coleman, Hoffer, and Kilgore (1981) use data from the National Center for Education Statistics study, “High School and Beyond,” to conduct a comparison of public and private high schools. The data compiled in the “High School and Beyond” study on nearly 60,000 high school students at over 1,000 schools included student questionnaires, student testing, staff questionnaires about each school, and teacher questionnaires about the students surveyed (Coleman et. al, 1981, p. xiii). Based on their analysis of this data, Coleman et al. conclude that, “When family background factors that predict achievement are controlled, students in both Catholic and other private schools are shown to achieve at a higher level than in public schools” (p. xx). While Coleman et al. allow that self-selection (and perhaps de-selection) may be an additional factor beyond parental background influencing student achievement, they nonetheless see virtue in analyzing differences in the characteristics of public and private schools given the difference in

achievement when other parental background factors (race, SES, etc.) are controlled.

Among the characteristics Coleman et al. identify as distinguishing private and Catholic schools from district schools are: greater safety and discipline, somewhat higher college aspirations and expectations, and greater academic demands including fewer non-academic course offerings.

Rutter et al. (1979), Phi Delta Kappa (1980), and Coleman et al. (1981) are distinguished by their effort to go beyond school climate to a more in-depth look at educational practices. From the discussion of teacher collaboration in Rutter et al. (1979) and Phi Delta Kappa (1980) to the discussion of course offerings in Coleman et al. (1981), these studies suggest that successful schools will have specific effective practices in common. However, these studies fail to tell the story of how these practices combine to create unique successful school communities. Given that these studies do not demonstrate that schools with the highlighted characteristics are always successful, it would be useful for current researchers to not only explore the presence or absence of these characteristics in successful charter schools, but to explain how their interaction produces success.

### Alternative Perspectives on the Effective Schools Literature

Skeptical reviewers of the effective schools literature challenge both the methodology and conclusions of the effective schools researchers (Cuban, 1983; Firestone, 1991a; Purkey & Smith, 1983; Rosenholtz, 1985; Rowan, Bossert, & Dwyer, 1983). Purkey and Smith (1983) label the effective schools literature as “weak... most notably in its tendency to present narrow, often simplistic, recipes for school improvement derived

from nonexperimental data” (p. 427). According to Purkey and Smith (1982), effective schools research can be classified into four major categories: outlier studies, case studies, program evaluation, and other studies.

In the outlier studies, such as Brookover et al. (1979), researchers sort a given sample of schools (for example, all of the elementary schools within a particular city) by student achievement test scores, control for socioeconomic factors, and then use surveys or case studies to compare the highest achieving schools to the lowest achieving schools (Purkey & Smith, 1982). The studies that Edmonds (1979) cites, including his own 1974 study of Detroit schools, fall into the category of outlier studies. Firestone (1991a) reports that these outlier studies have been criticized for failing to adequately control for family background, for designs that make it difficult to distinguish correlation from causation, and for offering insufficient insight into how the “effective” characteristics were achieved and maintained within the “effective” schools.

Effective schools case studies, such as Weber (1971), and program evaluations focus on even smaller samples than the outlier studies and are more vulnerable to charges of researcher bias. An example of such research is “Ingredients of a Successful School Effectiveness Project,” an article that profiles Milwaukee’s Project RISE, an initiative to implement the principles of effective schools in 18 elementary schools (McCormack-Larkin & Kritek, 1982). This article purports to show that Project RISE is a promising model for effective schools reform and is co-authored by Maureen McCormack-Larkin, former assistant director of Project RISE. While studies such as this one may have eased dissemination of effective schools practices, they are sharply criticized within the educational research community. For example, Purkey and Smith (1982) argue, “The

inherent weakness of the case study approach and the small samples seem a frail reed upon which to base a movement for school improvement” (p. 65).

The essence of the critique offered by Purkey and Smith (1983) is that while the conclusion of effective schools researchers – that urban school effectiveness is possible – is a valid contention, they are misguided in their search for a list of silver bullet characteristics that schools can simply implement to achieve effectiveness. Purkey and Smith explain, “Even if these ‘easy-to-assemble’ model variables were necessary for effective schools, they would not be sufficient... In fact, current theories of school organization suggest that there are structural and procedural characteristics of schools that mitigate against this sort of top-down change” (p. 439).

As an alternative, Purkey and Smith (1983) offer a theory of school improvement that emphasizes the importance of school culture. They accept as common sense the notion in effective schools literature that such factors as order and high academic expectations will contribute to a school climate conducive to student achievement. However, Purkey and Smith argue that, “an academically effective school is distinguished by its culture: a structure, process, and climate of values and norms that emphasize successful teaching and learning” (p. 442). Rosenholtz (1985) arrives at a similar emphasis on school culture based upon her critical review of the effective schools literature. She posits that in effective schools “there is tighter congruence between values, norms, and behaviors of principals and teachers, and the activities that occur at the managerial level are aligned closely with, and facilitative of, the activities that occur at the technical level” (p. 360). In a similar vein, Rowan, Bossert, and Dwyer (1983) call for a shift in research emphasis to examining the impact of school culture on

achievement; they write “future research should test explanations for why schools have effects on student achievement and arrive at a richer understanding of the school as a formal organization” (p. 30).

Due in part to the methodological criticism of the literature of effective schools and in part to the failure of school district effective schools initiatives to bring about sustained widespread improved student outcomes, subsequent researchers interested in identifying factors critical to the success of individual urban schools placed far more emphasis on exploring issues of organizational culture (Hill, Foster, & Gendler, 1990; Bryk, Lee, & Holland, 1993; Darling-Hammond, 1997). For example, Hill, Foster, and Gendler (1990) compared the cultures of comprehensive zoned high schools with those of specialized magnet high schools and Catholic schools. They conducted extensive interviews, made observations, and examined school documents at 13 schools in New York City and Washington, DC. Like their predecessors in the effective schools research movement, Hill et al. argued that these “focus” schools – specialized magnet schools and Catholic schools – produce better academic results because of their distinct cultures. The characteristics of these cultures emphasized by Hill et al. included clear missions focused on student outcomes, strong social contracts, strong commitments to the parenting role of school, high academic standards for all students, problem-solving organizational orientations, staffing decisions aligned with their missions, and accountability.

The shift in the effective schools literature toward an examination of school culture paralleled a shift in urban education reform toward school choice and the creation of schools with increased freedom to create unique school cultures, such as magnet schools and alternative schools. In fact, in many urban communities this shift has

culminated in the establishment of charter schools, which possess the maximum degree of autonomy available to public schools. If, as Purkey and Smith (1983), Hill, Foster, and Gendler (1990), Bryk, Lee, and Holland (1993), and Darling-Hammond (1997) contend, school success can be traced to critical attributes of school culture, then charter schools are uniquely positioned (i.e., differently positioned than district schools) to achieve success by virtue of their relative independence in making decisions on budgets, staffing, curriculum and instruction, and school culture. Therefore, this dissertation seeks to both compare the cultural characteristics of schools that bridge the achievement gap with the attributes cited by education researchers and to describe *how* these schools use their autonomy to produce effective cultures.

Assumption # 2: Standardized test scores provide a useful measure of the effectiveness of individual schools in bridging the achievement gap between African-American students and white students

The first question researchers interested in effective schooling must address is “How is educational effectiveness defined or measured?” In a 1982 interview with Ron Brandt, Edmonds argues that standardized tests are “at this moment – the most realistic, accurate, and equitable basis for portraying individual pupil progress” (p. 14). The virtue of standardized tests, in the view of Edmonds and other effective schools researchers, is that they provide information by which low-income students of color can be compared to middle class white students to determine school effectiveness (Brookover et al. 1979; Edmonds, 1979; Weber, 1971). As Edmonds (1979) explains, “Specifically, I require that an effective school brings the children of the poor to those minimal masteries of

basic school skills that now describe minimally successful pupil performance for the children of the middle class” (p. 3).

On the other hand, critics of effective schools research argue that focusing on standardized test scores is too narrow a definition of school effectiveness. For example, Richards (1991) argues “policymakers should avoid the reductionism of the basic skills approach because it denies other important goals of schooling that are difficult to measure” (p. 38). Richards (1991) recommends that in place of a narrow focus on skills tests, educational researchers interested in identifying effective schools should develop “multiple-outcome indicators” that include “equity, efficiency, and value-added outcomes” (p. 38). Likewise, Newmann (1991) stresses the complexity of measuring effectiveness when he asks:

Which of the following criteria should be used to determine the effectiveness of a high school? Rates of attendance, dropout, admission to higher education or employment; student scores on achievement tests; student participation and success in extracurricular activities; scores on attitude surveys that assess self-esteem, racial tolerance, political efficacy, or school climate; reductions in teenage pregnancy, drug abuse, or gang participation? (p. 59-60)

Effective schools researcher Sizemore (1985) offers a compelling response to criticism of standardized tests as a measure of school efficacy. She acknowledges that achievement above national or local norms on standardized tests in reading and math is “a training function and not the sole criterion for quality education which necessarily included socialization, and certainly, enlightenment” (p. 273). However, Sizemore argues that, “we adopted this criterion because of the chronic failure of most school systems to service black poor clients and to teach them how to read and compute” (p. 273). For Sizemore (1985), basic skills are a prerequisite for higher learning, or in her

words, “First, one must learn to read; then, one can read to learn” (p. 274). Thus, if only a few schools are able to equip low-income African-American students with even basic skills, then Sizemore (1985) wants to at least understand what those schools are doing. This task is particularly urgent within the rapidly growing charter school movement. The dozens of new urban charter schools that open each year need mechanisms by which to learn from those schools that are succeeding in equipping African-American students with basic skills. Moreover, if charter schools cannot learn from successful charter schools and out-perform urban district schools, then a key rationale for their creation – the notion that increased autonomy would yield increased achievement – will be disproved.

While acknowledging the risks of using standardized tests as the sole means to identify high-performing schools, on the basis of Sizemore’s compelling arguments and the political realities of the contemporary standards-based assessment movement in education in Massachusetts and nationally, this dissertation relies on student performance on the Massachusetts Comprehensive Assessment System (MCAS) as the critical criterion for the selection of the three schools under study. Given that passing the MCAS exams in English Language Arts and Mathematics is a prerequisite for graduation from high school, these exams are by design the standard for minimum student competence for all Massachusetts students. Moreover, the approach taken by Massachusetts to assessing school efficacy – establishing state academic standards and measuring student progress toward those standards with state-wide testing – closely mirrors the model mandated for schools nationally by the 2001 federal No Child Left Behind Act (Kurtz & Leonard, 2002, p. A1). It should also be noted that recent Massachusetts gains on the National

Assessment of Educational Progress, widely used by education researchers as an indicator of student achievement, parallel state-wide improvements in MCAS scores (Greenberger, 2001, p. A1). African-American students in each of the charter schools selected for this study are producing MCAS proficiency rates significantly higher than the state averages for African-American students of the same socioeconomic status. In fact, the students at Neighborhood House Charter School, Academy of the Pacific Rim Charter School, and particularly Roxbury Preparatory Charter School are bridging the achievement gap between African-American students and white students on the 7<sup>th</sup> and 8<sup>th</sup> grade English Language Arts and Mathematics MCAS tests.

Assumption #3: As a result of their autonomy – defined as freedom plus accountability – charter schools are uniquely positioned (i.e., differently positioned than traditional district schools) to implement effective practices.

Noted education researcher Seymour Sarason (1998) calls charter schools, “the most radical educational reform effort in the post World War II era in that states encourage and permit these schools to be created exempt from burdensome, stifling, innovation-killing features of the culture of existing systems” (p.vii). Like many supporters of the charter school concept (including Wilson (1992), Nathan (1999), and Finn, Manno, & Vanourek (2000)), Sarason (1998), a charter school skeptic, sees the potential for charter schools to implement effective educational practices without the predictable hindrances of educational bureaucracies – from teacher tenure rules to central office resistance to pedagogical innovations. Interestingly, Coleman et al. (1981) foreshadow this argument in their study of public and private schools:

[T]he constraints imposed on schools in the public sector (and there is no evidence that those constraints are financial, compared with the private sector) seem to impair their functioning as educational institutions, without providing the more egalitarian outcomes that are one of the goals of public schooling. (p. xxix)

Not surprisingly, charter school proponents frequently cite the effective schools literature as a rationale for charter legislation. For example, Nathan (1999) writes “Edmonds spent years studying and documenting characteristics of schools, and his research showed that public schools can make a major difference for all kinds of students, a finding that is still relevant today” (p. xxiv). Nathan (1999) references Edmonds in arguing that charter schools can be a mechanism to create more schools that are “effective” for students who have been failed by district schools in the past. Finn et al. (2000) also place charter schools in the “effective schools” tradition. Finn et al. (2000) summarize effective schools research and connect its successful implementation to the type of school-level autonomy promised in charter school legislation. In fact, Wilson (1992), in a text that was influential in the Massachusetts education reform debates that produced charter schools, argues that the autonomy afforded by charter school status is a prerequisite for successful adoption of innovative strategies for raising student achievement, particularly for low-income students of color. Indeed, many of the allies of charter school legislation, such as the conservative Pioneer Institute that published Wilson (1992), have been supporters of decentralization in other areas of public life because of the conviction that the freedom to innovate at the local-level is critical to solving various social ills.

For the purposes of understanding how charter school autonomy functions in the three schools under study, autonomy will be defined as the combination of freedom and accountability. In describing charter school freedom, Miron and Nelson (2000) write,

“The chartering contract frees schools from most of the rules and regulations that apply to traditional public school systems in exchange for increased accountability – ultimately, high student academic achievement” (p. i). Miron and Nelson somewhat overstate the extent of charter school freedom in light of the constraints imposed by federal civil rights law, federal special education requirements, federal Title I requirements, and state mandates (such as statewide curricula and assessments) (Heubert, 1997). However, their overall point regarding the relative freedom of charter schools in comparison with traditional district school is still accurate. When creating their budgets, charter schools in Massachusetts – unlike district schools – are free to set their own teacher salary scale, to negotiate with individual vendors, and to allocate resources without abiding by the spending priorities or programmatic decisions of the local school committee. In the area of staffing, charter schools in Massachusetts may hire teachers who are not certified by the state (although they must have passed the state teacher exam) and therefore it is considerably easier for a charter school – as opposed to a district school – to hire teachers who have taught in private schools but have not completed formal teacher education or mid-career professionals with subject-matter expertise but without teaching experience or formal teacher education. In addition, charter school hiring decisions are made at the school-level as opposed to the district-level and are not constrained by the seniority and transfer roles that affect hiring decisions in traditional district schools. In the area of curriculum, charter schools in Massachusetts must participate in the state assessment system based on the state standards, but are free to establish their own curriculum objectives, their own scope and sequence, and their own internal assessment system. Unlike district schools, charter schools need not implement curricular programs or

textbook series adopted or approved by their district's school committee (e.g., Everyday Math or Reading Recovery). Charter schools in Massachusetts have wide latitude – unlike district schools subject to school committee authority – in developing their school cultures including creating their own dress codes, establishing their own codes of conduct, setting their own hours, and structuring their own enrichment and character education programming. In explaining the relationship between charter school freedom and accountability, Nathan (1999) writes, “Public schools should not continue to receive tax funds regardless of how well they perform; funding should be tied to student achievement” (p. 18). Thus, Nathan argues that charter schools will, at least in part, make good use of their freedom because of the threat of closure if they fail to raise student achievement. The claims for the potential of charter school autonomy put forward by Nathan (1999), Finn et al. (2000), and other proponents are supported primarily by case study evidence. They point to individual schools with impressive results, including Academy of the Pacific Rim Charter School, which is briefly profiled by Finn et al. (2000), to argue that charter schools can be more effective than district schools in serving low-income students of color.

On the other hand, charter school critics are wary of extrapolating from case studies that autonomy in and of itself leads to greater efficacy. They point to recent state-wide studies to argue that, in the aggregate, charter schools are not any more likely to be effective than district schools. Indeed, recent studies conducted at the state and national level have yielded, at best, conflicting results (American Federation of Teachers, 2002; Bifulco & Ladd, 2004; Finn, Manno, & Vanourek, 2000; Gill et al., 2001; Hoxby, 2004; Loveless, 2003; Massachusetts Department of Education, 2006; Miron, 2005; Miron &

Nelson, 2001; Miron, Wygant, Cullen, & Applegate, 2006; SRI International, 1997; UCLA, 1998; Zimmer & Budin, 2005). Citing studies by SRI (1997) and UCLA (1998) among others, Good and Braden (2000) argue, “The most consistent finding in study after study is that there is virtually no controlled experimentation in charter schools and little innovation” (p. 746). According to SRI (1997), a state-funded evaluation of California charter schools, “we found the implementation of classroom practices supported by research on effective teaching for meaning and understanding (e.g. thematic and interdisciplinary instruction, team teaching, multi-age grouping, and technology use) to be uneven...” (p. S-7). This conclusion is echoed in UCLA (1998), another study of California charter schools, which states that, “in terms of instructional practices – classroom organization, curriculum, and pedagogy, for example – we found that the majority of charter school teachers employed techniques commonly found in non-charter public schools” (p. 53). Miron and Nelson (2001), in a meta-analysis of state-wide studies of charter schools conducted since passage of the first charter school law in 1991, found that “the existing body of research on charter schools’ impact on student achievement reveals a mixed picture, with studies from some states suggesting positive impacts, studies from other states suggesting negative impacts, and some providing evidence of both positive and negative impacts” (p. 30). This conclusion is echoed in Miron and Nelson (2002).

Braun, Jenkins and Grigg (2006) conducted an analysis, using hierarchical linear modeling, of 2003 National Assessment of Educational Progress (NAEP) fourth grade student performance data for the National Center for Education Statistics of the U.S. Department of Education. The authors found that, controlling for a variety of student

characteristics, the mean fourth grade scores for charter school students were lower than those for students in public district schools in both reading and mathematics. They found that the size of the performance difference for reading was smaller than for mathematics. Lubienski and Lubienski (2006) conducted a similar analysis of student performance data from the 2003 National Assessment of Educational Progress (NAEP) mathematics exams to assess variation in charter, private, and public school academic achievement. Lubienski and Lubienski found that after controlling for demographic differences students enrolled in charter schools performed 4.4 points lower than non-charter public schools on the 4th grade NAEP (which was statistically significant) and outperformed students in non-charter district schools by 2.4 points on the 8th grade NAEP mathematics exam (which was not statistically significant) (p. 4). Peterson and Llaudet (2006), however, question the methodology and findings both of the Braun, Jenkins, and Grigg study and the Lubienski and Lubienski study because of the approach used to identify disadvantaged students, which they contend undercounts the proportion of low-income students in the private sector and overcounts the proportion of low-income students in the public sector. However, this debate fails to address the research questions this study explores, which focus on how three charter schools that are yielding superior results (based on raw data, not a controlled study) for African-American students – in comparison to those achieved by Boston Public Schools and the state of Massachusetts – are achieving those results. The linear achievement models used in the studies described above, whether they claim charter schools outperform their district counterparts at the state level or suggest that district schools nationally may outperform charter schools, do not explore the internal

processes (i.e., budget, staffing, curriculum and instruction, school culture) in charter schools that are bridging the achievement gap in comparison to their districts or states.

Additional recent research that seeks to more fully explore day-to-day life within charters also offers a mixed picture. According to Burian-Fitzgerald, Luekens, and Strizek (2004), charter school teachers are typically less experienced than other public or private school teachers, must perform a wider range of tasks including significant administrative duties, and are more likely to leave their schools. Miron and Nelson (2002) made similar findings in Michigan. On the other hand, Burian-Fitzgerald, Luekens, and Strizek (2004) find that charter school teachers are more likely to come from selective colleges than traditional district school teachers. Wohlsetter and Chau (2004) offer some evidence that charter schools – particularly elementary schools – are using their autonomy to adopt research-based curricular practices, but their conclusions are mixed and the uneven results of charters to date (see above, e.g., Miron & Nelson, 2002) suggests that even the adoption of best practice Wohlsetter and Chau describe is not translating into uniform success.

Even more critical of charter schools than these evaluators are the ideological opponents of charter schools – those who believe that charter schools as a market-based reform are a threat to the values underlying public education – such as Molnar (1996), Lewis (1998), and Orfield (1998). These critics combat arguments for the advantages of the autonomy of charter schools with examples of charter schools that are failing to positively impact student achievement. For example, Orfield (1998) writes, “Charter schools in the inner city are beset with troubles. According to a study by The Detroit Free Press in 1997 test scores at some charters in high-poverty neighborhoods in

Michigan were very low, with the Detroit schools performing below the city's already substandard average" (p. B7). Evidence cited by these critics demonstrates that autonomy alone does not necessarily lead to improved educational outcomes and, to the extent that it may eliminate important regulatory protections, can even have a negative impact.

Nevertheless, even charter school skeptics and critics acknowledge the existence of individual success stories, schools with traditionally under-served populations that are raising student achievement. Indeed, although the findings of state-wide and national studies that charter schools are performing at the same level or even worse than district schools may raise questions about the policy rationale for charter schools – i.e., that autonomy will yield superior results at scale – these aggregate findings actually serve to highlight the uniqueness of charter schools that are bridging the achievement gap and the importance of exploring what is taking place within those schools. Thus, charter school critics join charter school proponents in the call for more research on effective charter schools. Thus, this dissertation seeks not to offer an aggregate assessment of charter schools, but an exploration of how charter school autonomy is being put to use in three specific charter schools that are bridging the achievement gap.

Assumption #4: Decisions about budgets, staffing, curriculum and instruction, and school culture contribute to the effectiveness of three urban charter schools in bridging the achievement gap between African-American students and white students.

In discussing the direction further research on effective schools should take, Purkey and Smith (1983) point to the need for a better understanding of "how to develop

a desired climate” (p. 441). This search for an understanding of how effective schools can be developed is echoed in the literature of charter schools. Thus, this dissertation seeks to use decisions about budgets, staffing, curriculum and instruction, and school culture as a framework for understanding the cultural processes at three effective urban charter schools.

### Budgets

Recent research on the relationship between school finance and student achievement suggests several budgetary decisions consistently associated with better student outcomes: (1) smaller schools and smaller classes (which involve budgetary decisions on enrollment and staffing) (e.g., Darling-Hammond, 1997; Finn & Achilles, 1999); (2) reduced teacher loads that provide time for data analysis and reflection (which involve budgetary decisions on staff size and how staff are allocated across areas of responsibility) (e.g., Elmore, 2002; Miles, 1995; Shepard, 2000); (3) investments in professional development including instructional coaches and targeted training and support (e.g., Cohen & Hill, 2000; Miles, 2001); and (4) funding of programs that increase student learning time including after-school services, summer opportunities, and individual and or small group tutoring (e.g., Davis & Thomas, 1989; Heath & McLaughlin, 1994). Described in greater detail below, this research shows why charter schools’ freedom to allocate money towards these areas may be crucial in creating an effective academic environment.

To avoid repeating the mistake of the early effective schools literature – simply listing characteristics of successful schools without analyzing how they were generated,

their interplay, or how they are sustained – it is important to note that this dissertation will explore connections between these budgetary decisions and the school’s curriculum, staffing, and school culture. Failure to do so would constitute what Grubb and Huerta (2001) label “an inattention to the ‘black box’ of the classroom” – in other words, a failure to explore the actual interplay of school decisions and staff and student behavior that produces educational outcomes (p. 17). While charter school proponents laud the autonomy of charter school leaders to set their own budgets, little research has been done on the ways in which successful charter schools are using their financial resources in conjunction with decisions about curriculum, staffing, and school culture to raise student achievement.

Small Schools and Smaller Classes. Studies conducted over the last ten years often link student achievement to both smaller schools (Greenwald, Hedges, & Laine, 1996; Darling-Hammond, 1997) and smaller classes (Mosteller, Light, & Sachs, 1996; Ferguson, 1998a; Finn & Achilles, 1999; Nye, Hedges, & Konstantopoulos, 1999). Greenwald, Hedges, and Laine (1996) and Darling-Hammond (1997) argue that small schools can enhance student achievement, particularly in urban schools, because of the contribution close relationships with adults make to students’ learning. Both Robinson (1990), in his analysis of over 100 class size studies conducted between 1950 and 1985, and Finn and Achilles (1999) in their study of data from the Tennessee class size initiative (a K-3 randomized experimental study of class size), conclude that the benefits of smaller classes are greater for “minority” students and students attending “inner-city” schools. Among the benefits of smaller class size in Tennessee, Finn and Achilles list “improved teaching conditions, improved student performance during and after the

experimental years, improved student learning behaviors, fewer classroom disruptions and discipline problems, and fewer student retentions” (p. 98). Moreover, Finn and Achilles point out that teachers in smaller classes, not surprisingly, can do more of what works to boost student achievement – providing students with individual feedback, assessing students’ individual progress, and holding students accountable for their behavior and effort. It is important to note, however, that research on school size and class size does not uniformly suggest that small schools and small classes produce higher achievement (e.g., Hanushek, 1997). The interesting question for analysis in this study will not be simply whether these schools that are effectively bridging the achievement gap use their budgetary autonomy to establish small enrollments or small classes, but rather how those characteristics, if they are present, interact with other organizational and pedagogical choices to affect student achievement.

Teachers’ Time. Given that human resources are almost always the largest expense of schools and school districts, an analysis of exactly how those human resources are deployed is a critical element to analyzing a school’s budget. Many researchers, including Elmore (2002), Darling-Hammond and Falk (1997), Darling-Hammond (1997, 1998, 2000), Guskey (2003), and Shepard (2000), argue that additional teacher time for providing students with individual attention, for collaboration with colleagues, and for professional development is a prerequisite for raising achievement in urban schools. For example, Shepard’s (2000) description of the optimal use of internal assessments points to the need for teachers to have significant time not dedicated to whole-class instruction – time to develop rigorous assessments that promote critical thinking, time to evaluate

student work and reflect on its connection to instruction, time to identify models of excellence, time to meet with students in tutoring contexts to provide feedback, etc.

Miles (1995) observes that a significant barrier for teachers committing sufficient time to planning, collaboration, and professional development is student load. In fact, Miles reports that in the Boston Public Schools the typical secondary-level teacher teaches 100 to 125 students each day. Miles (1995) found that Boston's "pull-out" system – serving special needs students, bilingual students, and Title I students in separate classrooms – resulted in regular education classrooms with an average of 23 students per class as opposed to a district-wide average (for regular education, special education, bilingual, and Title I students) of 13 students per teacher (p. 478). Miles found this practice occurred despite legislation that requires schools to place special needs students in the "least restrictive environment" possible and despite the freedom schools serving high-poverty populations have under Title I to use the funds for the student body as a whole. Citing research that demonstrates the benefits of small class size and that supports the use of more flexible inclusive grouping, Miles suggests that a more effective use of Boston's resources would be to lower class sizes generally by reassigning staff resources designated to provide "pull-out" services to general education classrooms. Similarly, Darling-Hammond (1998), in comparing school staffing patterns in the U.S. to school staffing patterns in other countries, argues that "because these other countries spend most of their money on knowledgeable teachers rather than on other staff to direct and augment the work of teachers, they can also provide teachers with more time for professional development activities, work with colleagues, and meetings with parents and students – often as much as 10 to 20 hours per week" (p. 10).

In the schools under study, it will be important to note the nature of teacher loads, how those loads are achieved (including factors such as teacher hours, the structure of the academic schedule, the organization of teacher preparation periods, and the use of non-teaching personnel), and how teachers' non-instructional time is directed. It will also be important to explore how these decisions are connected to each school's educational philosophy and culture. The experience of these three schools can then be contrasted with the finding that charter school teachers are often asked to take on substantial non-instructional responsibilities (SRI, 1997; UCLA, 1998) and frequently suffer the consequences of "a lack of clarity and confusion over exact roles and responsibilities" (SRI, 1997, p. S-6).

Professional Development. Current research suggests that not only investing in professional development, but more importantly investing in the right kind of professional development, can contribute to higher student achievement. In a study of four large urban district budgets, Miles (2001) found that the districts actually spent quite a bit of money on professional development, 2-4 percent of the district budget in fact (p. 56). However, she also found that these resources were typically directed at "many fragmented, sometimes conflicting, programs managed by different departments" (p. 56). Miles suggests that higher student achievement could be attained through a coordinated professional development effort that "responds to school-level student performance priorities, focuses on instruction, and provides coaching for individual teachers and teams over time" (p. 56). In a similar vein, Darling-Hammond (1998) advocates professional development opportunities for teachers that are: "connected to teachers' work with their students, linked to subject matter and to concrete tasks of teaching, organized around

problem-solving, informed by research, and sustained over time by ongoing conversations and coaching” (p. 9). Birman et al. (2000) and King & Newmann (2000) similarly emphasize the importance of collaborative professional development within schools.

In addition, both Sebring and Bryk (2000) and Newmann et al. (2001) emphasize that to be effective, professional development initiatives must be fully aligned with the school’s common instructional framework. In their study of mathematics reform in California, Cohen and Hill (2000) found that “when educational improvement is focused on learning and teaching academic content, and when curriculum for improving teaching overlaps with curriculum and assessment for students, teaching practice and student performance are likely to improve” (p. 330). Similarly, in an analysis of the cost implications of adoption of several whole-school reform models that have shown promising student achievement results (e.g., Success for All, Accelerated Schools, etc.), Odden (2000) identifies a coherent professional development program as a particularly important investment. Odden suggests that successful implementation of these whole-school reform models, many of which offer a vision for professional development consistent with that articulated by Darling-Hammond and Falk (1997) and Elmore (2002), requires spending roughly \$120/student to “allow schools to provide their faculties with a two- to three-week summer institute (including some pay for all teachers who attend) and at least 20 days of professional development and assistance during the school year” (p. 436).

Miles (2001), Darling-Hammond (1998), Sebring and Bryk (2000), Newmann et al. (2001), Cohen and Hill (2000), and Odden (2000) not only stress the importance of

investing in professional development, but also the integral relationship of professional development to the school's broader vision for advancing student achievement. It will thus be important to explore both how much the schools under study invest in professional development and exactly what their professional development dollars are buying. For example, given their strong performance on the MCAS, one would expect to find in the schools under study a substantial degree of alignment between teachers' professional development, the school's curriculum and assessment practices, and the academic priorities expressed in the Massachusetts standards and the MCAS (e.g., writing an effective five-paragraph essay on the 7<sup>th</sup> grade English Language Arts exam, writing about strategies for solving math problems on the 6<sup>th</sup> and 8<sup>th</sup> grade Mathematics exams, etc.).

“Out-of-School” Time. Davis and Thomas (1989) argue that, “Science has confirmed beyond any reasonable doubt that academic engagement – time on task – is indeed the single most crucial factor contributing to student achievement” (p. 117). Thus, it should come as little surprise that investing in out-of-school time programming is growing in popularity nationally as a strategy for both protecting students from various social ills (e.g., drugs, gangs, teen pregnancy) and raising student achievement. For example, Heath and McLaughlin (1994) argue persuasively for increased partnerships between schools and community-based organizations to create “all-day, all-year learning opportunities for youth” (p. 278). In addition, Shanahan (1998), in an extensive review of studies on tutoring – particularly reading tutoring – argues that one-on-one or small group tutoring, especially when provided by experienced and well-trained tutors, can contribute positively to student achievement. Odden (2000) also cites tutoring as an

important investment for whole school reform intended to raise student achievement.

Such tutoring could be expected to occur during the school day, as well as before school, after school, on the weekends, and during the summer.

As charter schools, the three schools under study have significant latitude in determining the length of their school day, the length of their school year, and the relationship between their out-of-school time programming and what takes place in school. All of these decisions have potential budgetary implications such as paying regular school staff to work longer hours, hiring separate staff for after-school, weekend, or summer work, funding student participation in partner programs, etc. It will be important to understand how these schools use their fiscal flexibility in conjunction with their other freedoms.

Fiscal Challenges Unique to Charter Schools. While the schools under study enjoy substantial autonomy in budgetary decision-making, they face significant fiscal challenges unique to charter schools. First, although Massachusetts charter schools receive per pupil public funding (city, state, and Title I) equivalent to the per pupil average spent by the sending district on operating costs (i.e., teacher salaries, instructional materials, etc.), Massachusetts charter schools are not reimbursed for capital costs such as purchasing and renovating a building (although they are provided with small noncompetitive facilities grants which can be used to defray a portion of a school's on-going facility costs including debt service and/or lease payments) (Massachusetts Department of Education, 2002). Second, charter schools do not enjoy the economies of scale of their sending districts (particularly those in urban districts that typically have tens of thousands of students), and thus, frequently spend a greater share of their funds on

administrative costs than traditional district schools (AFT, 2002). Third, when charter schools exercise the freedom to extend the school day or school year, they do not receive additional public funds (unless they are successful in securing competitive state or federal grants). Fourth, given the constraints described previously and the role of human resources as schools' primary expense, there is evidence that charter schools are using their autonomy in staffing to establish teacher salaries significantly below that of area district schools (Miron & Nelson, 2000; AFT, 2002). Obviously, this practice risks potential negative implications for teacher job satisfaction and teacher retention.

To counteract the four factors described above, there is significant pressure for charter schools to raise private funds (UCLA, 1998; Kane & Lauricella, 2001; Wells & Scott, 2001). Kane and Lauricella write, "Charter schools often create booster organizations and write grant proposals to supplement additional programs. However, for disadvantaged populations charter schools may encourage schools to tap sources of private capital that heretofore have been ignored" (p. 217). It will be interesting to learn how the schools under study are meeting the fiscal challenges unique to charter schools and to what extent they have, as Kane and Lauricella suggest, developed successful strategies for accessing private funds.

### Staffing

Charter schools in Massachusetts, free from the constraints of union contracts and many of the state's teacher certification requirements, have significant control over whom they employ and how they organize them. Given the central role that analysis of staffing has played in research on the practices of schools successful in bridging the achievement

gap from Weber (1971) to Edmonds (1986) to Ferguson (1998b) to Fullan (2002), this study must carefully explore how the schools under study use their autonomy in selecting teachers and school leaders.

Teachers. Recent research is remarkably consistent in defining the skills required of well-qualified teachers able to help students bridge the achievement gap: (1) high expectations for students; (2) understanding of the learning process; and (3) content expertise. In addressing teachers' expectations for students, Ferguson (1998b) writes, "If they expect black children to have less potential, teachers are likely to search with less conviction than they should for ways to help these children to improve, and hence miss opportunities to reduce the black-white test score gap" (p. 312). By articulating high standards and high expectations, Ogbu and Simons (1998) suggest, teachers can send a message to their students that they believe in them and that they reject negative stereotypes about their students' academic capacity.

In describing what teachers must understand about the learning process, Elmore (1995) argues that effective teachers must be able "to understand individual students' prior knowledge and experience, to anticipate recurring misconceptions in students' knowledge, to construct experiences for students inside and outside of the classroom that create the necessity to draw inferences, and to model intentional learning in their own actions in ways that have meaning for students" (p. 359). Darling-Hammond (1997) stresses the importance of teachers' understanding of differences in learning style, prior knowledge, and relationship to schooling that may result from students' cultural, racial, and community experiences. Darling-Hammond's (1997) contention is supported by research by Dreeban and Gamoran (1986) that suggests that different instructional

choices by their teachers were more responsible for racial differences in 1<sup>st</sup> grade students' reading skills than outside-of-school factors. Both Elmore (1995) and Darling-Hammond and Falk (1997) also emphasize the importance of teacher content knowledge. Their view is confirmed by Monk's (1994) analysis of data on student achievement in math and science from the Longitudinal Study of American Youth (LSAY). Monk found that "teacher content preparation as measured by the number of courses a teacher took in the subject area being taught is positively related to how much mathematics and science students learn at the secondary level" (p. 142). In addition, Monk concluded that coursework in subject-specific pedagogy also has a positive effect on student achievement in mathematics and science.

Developing and maintaining a corps of talented teachers with the skills described above is a crucial challenge for all schools. Many researchers emphasize the importance of creating dynamic roles for teachers and environments that support their continuous learning and thereby encourage them to remain in the classroom. Darling-Hammond (1997) points to the variation in teacher roles and responsibilities in restructured schools effective in raising student achievement. She describes teachers as having numerous leadership opportunities on various teams and committees, having the freedom to establish and lead innovative programs, and having the opportunity to present at conferences and workshops. Darling-Hammond and McLaughlin (1995) stress the importance of teacher participation in "professional communities" not only within their own schools, but also outside of their schools, such as multi-school teacher networks, university partnerships, and professional organizations working on issues such as curriculum development, standards, assessment, and teacher evaluation (e.g., National

Board Certification) (p. 599). Substantial evidence exists showing that staff culture built through such reflection and collaboration results in greater dedication to teaching as a career (Talbert & McLaughlin, 1994; Darling-Hammond, 1997; Cohen & Hill, 2000).

Other researchers emphasize the potential role for creative compensation strategies in teacher retention. For example, Miles (2001) argues that attracting and retaining high-quality teachers requires that school districts “find ways to restructure teacher salaries and responsibilities to provide the most talented, productive teachers with the opportunity to earn more competitive salaries during their careers” (p. 54). In the schools under study, this may be reflected in merit pay systems, merit-based provision of additional benefits (e.g., funding for graduate study, funding for pursuit of National Board Certification, etc.), or other creative strategies for compensation that are effective in retaining talented teachers. Sebring and Bryk (2000) not only emphasize the important role of teacher recruitment and retention in successful school improvement efforts, but also describe successful principals’ efforts to “counsel out non-performing teachers” (p. 442).

This study must explore who successful urban charter schools hire to teach in their classrooms, how those teachers are evaluated, and how these schools retain effective teachers. Understanding this area of these schools’ functioning is particularly important in light of the heavy emphasis charter school proponents place on the relationship between autonomy in staffing and improved student achievement. In arguing for charter schools, both Wilson (1992) and Nathan (1999) decry the inability of principals in traditional schools to control employee hiring, evaluation, and termination. Nathan (1999) laments that excellent teachers in district schools quickly “discover that it is

difficult to remove mediocre teachers from public schools” (p.xxix). He adds that, “As the frustrations mount, energetic, enthusiastic teachers become bitter, burned-out teachers” (Nathan, 1999, p. xxix). On the other hand, Nathan (1999) and Finn et al. (2000) celebrate the authority charter schools have to remove staff members who do not meet the individual schools’ performance standards. These authors further argue that charter schools’ freedom in hiring will allow them to draw talented teachers from as yet untapped pools. Charter legislation, Finn et al. assert, “opens the classroom door to scientists and engineers who are expert in biology, chemistry, physics, or math, who are interested in teaching, and who are willing to work with a master teacher to acquire the necessary pedagogical tools” (p. 72). Exploring whether the vision articulated by Wilson (1992), Nathan (1999), and Finn et al. (2000) is borne out in the schools under study is particularly important in light of the finding in several large-scale studies that charter schools’ faculties, in comparison to traditional district schools, are less educated, less likely to be certified, and less experienced (SRI, 1997; Miron & Nelson, 2000; AFT, 2002).

School Leaders. Increasingly, research on schools that are successfully bridging the achievement gap emphasizes the characteristics of the school leaders. Fullan (2002) asserts that a critical factor in school’s capacity to achieve positive student learning outcomes is whether or not the principal displays five key characteristics: “moral purpose, an understanding of the change process, the ability to improve relationships, knowledge creating and sharing, and coherence making” (p. 17). Fullan’s view is reflected in research done by Sebring and Bryk (2000) and Bryk and Schneider (2002) on successful school reform efforts in Chicago. Sebring and Bryk cite trust as the

foundation for the cooperative work necessary for successful school improvement. They argue that development of this trust begins with principals who are accessible, who are open to teacher and parent input, who act with integrity, who work hard to provide teachers with the resources they need, and who demonstrate deep concern for others' welfare. Sebring and Bryk describe principals who strengthen the school's instructional program by recruiting high-quality teachers, organizing professional development opportunities that directly address the school's goals for academic improvement, minimizing infringements on instructional time, and maximizing resources for classroom use.

Based on a review of the research literature on school leadership, Leithwood, Seashore Louis, Anderson, and Wahlstrom (2004) argue that there are three components to effective school leadership: (1) setting directions, meaning building consensus around a coherent vision for the school including common goals, a shared understanding of the critical activities necessary to achieve those goals, and clear expectations for performance; (2) developing people, meaning supporting the development of teachers and other staff members through collaborative planning and professional development, modeling of best practices, supervision and coaching, and the creation of shared norms around what constitutes effective instruction; and (3) organizational design, meaning creating an organizational context that supports collaborative learning, building effective partnerships with families and communities, and effective resource acquisition and management. Elmore's (1999) research in New York City's District Two leads him to similar conclusions about the role of the school leader. Elmore calls for a shift from the traditional view of principals as business managers to an approach in which principals are

“recruited, evaluated, and retained or dismissed on the basis of their ability to understand, model, and develop instructional practice among teachers and, ultimately, on their ability to improve student performance.” (1999, p. 13). It will be important to determine whether or not the school leaders in the schools under study, working with similar student populations but with greater autonomy than the principals studied by Sebring and Bryk (2000) and Elmore (1999), exhibit the same qualities and behaviors.

Recent research on charter schools also suggests additional dimensions for the analysis of school leaders in charter schools that are bridging the achievement gap.

UCLA (1998) says of successful charter school leaders:

While many of these individuals did serve as strong instructional leaders for their schools, as described in the Effective Schools literature, we found that oftentimes their leadership took on a different emphasis... what struck us as “strong” about these leaders was their ability to draw together diverse constituencies, such as parents, community members, and teachers, as well as to network outside the immediate school community. (p. 40).

Particularly in start-up charter schools (as opposed to conversion charter schools which are traditional district schools that have “converted” to charter status), UCLA (1998) found that successful charter school leaders demonstrated the attributes of successful entrepreneurs, including the ability to generate private investment dollars in the form of individual or foundation charitable giving. Similarly, Miron and Nelson (2000), in a study of Pennsylvania charter schools, note that, “in order to be successful, founding coalitions [which often include the school leaders] need to muster considerable political resources” (p. iv).

Fuller (2000c) argues that beyond providing instructional leadership, charter school leaders play “crucial roles in guiding the creation of coherent and sustainable charter organizations” (p. 242). Korach (2002), in a study of three Colorado charter

schools, posits that the development of an organizational “constitution” is critical to creating a healthy, sustainable charter school. Successful charter school leaders, according to Korach, should anticipate the emergence of conflicts and rather than relying on personal relationships or a shared belief in the school’s founding vision, create “clear roles and divisions of authority – and a process to deal with problems and grievances” (p. 73). Korach emphasizes the importance of such a constitution for resolving conflicts that emerge between the school leaders and the board as well as between founding teachers and newer teachers. In this dissertation, it will be important to explore how the charter school leaders work to ensure not only the academic effectiveness of their schools, but also their organizational viability and sustainability.

### Curriculum and Instruction

At the heart of a school’s efficacy is the substance of what it seeks to teach, its instructional program. Elmore (1995) offers six broad principles of effective instruction around which there is a consensus among contemporary educational researchers: (1) “the object of teaching is to nurture understanding,” (2) “understanding occurs in the context of specific bodies of knowledge,” (3) “understanding requires the active construction of knowledge by learners,” (4) “understanding requires the development of ‘basic’ and ‘higher order’ knowledge simultaneously,” (5) “learners differ substantially in the experience, the cognitive predispositions, and the competencies they bring to specific bodies of knowledge,” and (6) “learning is a social, as well as an individual, process” (p. 358-364). Although a comprehensive examination of classroom instruction in each of the three schools under study is beyond the scope of this dissertation, one would expect to

find in the three schools structures that support the model of instruction Elmore (1995) describes.

Newmann, Smith, Allensworth, and Bryk (2001) argue, based on data from school reform efforts in Chicago during the 1990s, that schools that succeed in raising student achievement are characterized by “instructional program coherence” which they define as “a common framework for curriculum, instruction, assessment, and learning climate” that is “pursued over a sustained period” (p. 299). Newmann et al. define a common instructional framework as one in which curricular content, teaching strategies, and assessments are coordinated within and across grade-levels to reinforce critical skills, minimize redundancy, and ensure a steady progression in rigor. Student support efforts including tutoring, remedial programs, and parent involvement activities must, according to Newmann et al., fully reflect this instructional framework. Thus one would expect to find substantial instructional program coherence in the schools under study, particularly given their substantial autonomy in the areas cited by Newmann et al. Citing her research on New Jersey charter schools, Kane and Lauricella (2001) argue that charter schools have an advantage in developing a “cohesive school program” as a result of the requirement in many states that schools applying for charters invest significant energy in defining the school’s mission and linking the school’s plans, for everything from budgets to school calendars to the school curriculum, to that mission (p. 219). An additional advantage the schools under study may have in achieving instructional coherence (although also a limiting factor on their autonomy in curriculum and instruction) is their obligation to implement the Massachusetts state curriculum frameworks and assess their students using the MCAS.

Beyond instructional coherence, recent research suggests that effective schools approach curriculum and instruction as a locus of continuous organizational learning. Shepard (2000) argues, “If we want to develop a community of learners – where students naturally seek feedback and critique their own work – then it is reasonable that teachers would model this same commitment to using data systematically as it applies to their own role in the teaching and learning process” (p. 12). Similarly, Darling-Hammond (1997) describes effective schools as ones in which data on student performance is continuously shared, analyzed, reflected upon, and used to refine curriculum and instruction. Elmore (2002) advances a vision of schools as learning organizations, suggesting that when a particular weakness is observed in students’ skill-base a collaborative intervention should be undertaken that would include teachers’ examining student work, conducting peer observations, and pursuing action research projects. The systems for organizational learning at the three schools under study may or may not conform with the vision articulated by Shepard (2000), Darling-Hammond (1997), and Elmore (2002), but can reasonably be expected to reflect a commitment to advancing student achievement through collaboration and reflection.

In terms of assessment practices, Shepard (2000) suggests seven strategies central to the effective use of internal assessment to support student learning: (1) assessments that allow teachers to understand what students can do both on their own and with adult support; (2) assessments that help teachers understand what background knowledge, previous experiences, and resources for learning students bring to the classroom; (3) assessments that are used in tutoring contexts to help students learn to self-correct; (4) assessments that challenge students to apply what they learned in various ways in various

contexts; (5) assessments that are accompanied by clear descriptions of expectations and models of excellence; (6) assessments in which students are given some of the responsibility for evaluating their learning; and (7) assessments which are used formally and informally by teachers to evaluate and refine instruction. In each of the three schools under study, one would expect to find internal assessment systems that draw on some or all of these strategies to achieve what Shepard labels instruction for “robust understandings” (p. 11). Although Shepard’s focus is on schools’ internal assessment tools, given the success achieved by these schools on the MCAS, it would be interesting to learn whether and/or how these schools have also applied these strategies to these external assessments.

Authors specifically focused on the psychological origins of the achievement gap, such as Ogbu and Simons (1998), Steele (1992), and Steele and Aronson (1998), articulate a culturally responsive vision for curriculum and instruction in schools that will be successful in raising the achievement of African-American students. Ogbu and Simons (1998) envision classrooms characterized not only by high standards, but also culturally relevant instruction that exposes students to models of African-American success and explicitly trains students in code switching. While also emphasizing the need for high expectations, Steele (1992) identifies the inclusion of African-American history and literature in the curriculum as an effective practice. Although the celebration and/or exploration of African-American culture is not explicitly included in the mission of the three successful charter schools under study, practices should emerge in the case studies that directly respond to the disidentification with education described in Ogbu and

Simons (1998), Steele (1992), and Steele and Aronson (1998) as an obstacle to African-American achievement.

Charter school advocates tend not to emphasize specific instructional strategies, but instead argue that charter school autonomy will free schools and teachers to be more creative in meeting students' needs. For example, Finn et al. (2000) argue, "Since charter schools confront less red tape, teachers can deploy their professional judgments, set their own instructional priorities, pick their materials, and engage their students in projects and activities that inspire them. They can write their own curriculum or adapt one to fit their pupils' needs" (p. 231). In fact, charter schools display a wide variety of instructional philosophies; for example, in Michigan, Reynolds (2000) found some charter schools focused on direct instruction and others focused on constructivist pedagogy, some schools that relied on prepackaged curricular materials such as Success for All or Chicago Math and others whose teachers develop almost all of their own materials. Although Massachusetts charter schools are obliged to implement the Massachusetts state curriculum frameworks and assess their students using the MCAS (see Massachusetts Department of Education, 2002), their curricular freedom results in a similarly broad range of instructional practices.

Despite the range of instructional philosophies found in charter schools, if educational researchers are to be believed, the three schools under study are likely to have instructional programs that are at once rigorous yet engaging, aligned with state standards yet deeply connected to students' own lives, based on high expectations yet structured to meet students where they are and bring them forward, and based on research and data-analysis yet reflective of the collaborative learning of teachers and students in

each classroom. Given the finding of UCLA (1998) that “[m]ost [charter school] teachers could not say what it was they do in a charter school that they could not have done in a regular public school,” of particular interest for this study will be the extent to which the autonomy provided by charter status has made the three schools’ successful instructional programs possible or facilitated their successful implementation.

### School Culture

Given their focus on the psychological factors that may contribute to the achievement gap, Ogbu and Simons (1998), Steele (1992), and Steele and Aronson (1998), emphasize the importance of school culture and offer a rich description of what their research suggests schools must do to advance African-American student achievement. Their conclusions are supported and enhanced by the work of other educational researchers focused on identifying practices effective in raising the achievement levels of students of color.

Ogbu and Simons (1998) offer a cultural-ecological theory of the achievement gap which focuses on the combined effects of “the system” – how minority groups are treated by the educational, economic, and political institutions of society – and “community forces” – how minority groups view and react to schooling as a result of their treatment by the system (p. 158). They posit that different minority groups develop different relationships to education depending on whether their historical presence in the United States is voluntary (e.g., Cuban immigrants, Chinese immigrants) or involuntary (e.g., African-Americans, Puerto Ricans). Ogbu and Simons argue that while voluntary minorities believe in the American dream and see education and hard work as the keys to

success, involuntary minorities are more ambivalent in their view of America, believing hard work and education to be important but highly conscious of the barriers erected by institutional racism and persistent discrimination. These scholars describe involuntary minorities as developing an oppositional identity with respect to school that leads to defiance, resistance, and poor academic outcomes. Thus, for Ogbu and Simons, “effective” schooling for involuntary minorities, African-Americans being the largest such minority group in the United States, must involve educational strategies designed to overcome the cultural-ecological roots of the achievement gap.

Ogbu and Simons (1998) offer six core strategies to combat the ambivalence involuntary minorities may feel about the role of school in success: (1) building trust; (2) culturally responsive instruction; (3) explicitly dealing with opposition/ambivalence; (4) role models; (5) high standards; and (6) parent and community involvement. Ogbu and Simons recommend that teachers develop strategies to build trusting relationships with their students in which their students will believe that they have their “best interests at heart” and will protect their identity (p. 180). Teaching code switching, including an understanding of how and when to use Black English and standard English, is identified by Ogbu and Simons as an essential element of culturally responsive instruction. Moreover, these authors stress the need for teachers to understand their students’ culture and language and to use that knowledge to craft strategies that will build trust. Ogbu and Simons recommend academic interventions designed to directly address students’ understanding of the role of school to help them “see that they can be successful in school and maintain their cultural identity” (1998, p. 181). One way to accomplish this objective is exposure to role models – mentors and or teachers who are members of

students' ethnic group "who are academically and professionally successful *and* who retain their minority identity" (p. 182). By articulating high standards and high expectations, Ogbu and Simons suggest, teachers can send a message to their students that they believe in them and that they reject negative stereotypes about their students' academic capacity. These scholars also stress frequent personal communication with parents, particularly about students' successes and strategies for parents to support their achievement, as an approach that would reduce mistrust of school.

Steele (1992) and Steele and Aronson (1998) focus on the thesis that the achievement gap can in part be traced to the impact of what they term "stereotype threat," the fact that "from the first grade through graduate school, blacks have the extra fear that in the eyes of those around them their full humanity could fall with a poor answer or a mistaken stroke of the pen" (Steele, 1992, p. 74). Steele and Aronson (1998) conducted a variety of experimental studies in which even subtle cues linking race and test performance negatively impacted the performance on black students. Steele (1992) hypothesizes, in similar fashion to Ogbu and Simons (1998), that the impact of stereotype threat is disidentification with school as black students seek to insulate their self-esteem from their academic life. Steele (1992) further argues that black students who resist disidentification face tremendous pressure from their peers who label them as defectors, because their approach to school conflicts with the very strategy their black peers are using to protect their self-esteem. To combat the effects of stereotype threat, Steele (1992) advocates "wise schooling" – education that is able "to see value and promise in black students and to act accordingly" (p. 75). Steele (1992) identifies four characteristics as essential to "wise" schooling: relationships between teachers and

students in which students feel valued; high and challenging expectations; racial integration or if segregated, a segregated environment where students' "confidence is based on strongly competitive skills and knowledge;" and inclusion of black history, culture, and literature in the primary curriculum (p. 78).

Perry (2003) has similar worries to Ogbu and Simons (1998), Steele (1992), and Steele and Aronson (1998) about the psycho-social obstacles to African-American student achievement that emanate from the caste like status of African-Americans and what she sees as a prevailing American cultural ideology of African-American intellectual inferiority, but she focuses on the role of schools in exacerbating those obstacles. Perry suggests that contemporary educators have much to learn from the history of African-American education in the pre-civil rights era. In particular, she describes segregated African-American schools before *Brown* in which African-American educators created school-communities she characterizes as "counterhegemonic" in that they "explicitly passed on those dispositions, behaviors, and stances that were viewed as essential to academic achievement (persistence, thoroughness, a desire to do one's very best, commitment to hard work)" (p. 94). According to Perry, pre-*Brown* segregated African-American schools sought to establish identification with school as an act of resistance and an assertion of a free identity. Perry worries that in the post-Civil Rights era schools are less effective in creating a narrative that promotes African-American identification with academic achievement because they have become "deritualized institutions" and "Almost none have a well-articulated message about the intellectual competence of their students" (p. 98). Perry writes with consternation that the task of achievement for African-American students in the post-

Civil Rights era is more complicated because “Schools make few attempts to systematically organize occasions to create desire, to inspire hope, to develop and sustain effort optimism, or to intentionally create multiple contexts that socialize students to the behaviors that are necessary for them to be achievers” (p. 100). Although Perry is not a charter school advocate, her description of the implications for practice of her critique of contemporary schooling sound strikingly similar to the claims of charter advocates like Price (1999):

When school communities are constructed such that membership in these communities means being an achiever, African-American students achieve in these school communities. Thus African-American youth achieve in Department of Defense schools, in Catholic schools, in some independent schools, in historically Black colleges, and in white colleges when they participate in programs that intentionally craft a social identity for them as achievers. (p. 100)

Perry’s ideal schools for promoting African-American achievement would expose students to opportunities to models of biculturalism and fluency in both African-American linguistic patterns and standard English, would expose students to models of African-American success, promote a strong feeling of membership in a community, and provide students with an academically rigorous curriculum that truly challenges and stretches them.

Further insights into the development of effective school cultures can be found in educational research concerned with broader issues of school effectiveness beyond psychological obstacles to achievement for African-American students. For example, Hill, Foster, and Gendler (1990) found that students in effective “focus” schools (New York City schools with specialized missions) described a dramatic difference between their behavior in their current schools and their previous zoned schools, a difference which confirmed calls in earlier effective schools research for orderly, disciplined school

environments. Frequently, students reported to Hill, Foster, and Gendler that in their zoned schools, “they had adopted antiacademic attitudes as a defense against other students” (p. 66). Interestingly, this observation is consistent with the arguments advanced by Ogbu and Simons (1998). Based on these interviews, Hill, Foster, and Gendler (1990) concluded, “Teenagers in all schools seem to accept academic discipline if they cannot avoid it; when such discipline is lacking, however, they succumb to peer pressure to defy the system” (p. 66). Similarly, Darling-Hammond and Falk (1997) found that students experience greater success in school environments that are “respectful, purposeful, physically and psychologically safe, and personalized so as to ensure close, sustained relationships between students and teachers and attention to special needs” (p. 197). Finn and Achilles (1996) identified teachers’ increased ability to provide students with individual feedback and to hold them accountable for their academic performance and behavior as key benefits of small schools. Darling-Hammond and Falk add that environments that foster close teacher-student relationships, through such mechanisms as small classes and advisory structures in which one adult is responsible for mentoring a small group of students, advance student academic achievement because “[t]eachers are more effective when they know students well, when they understand how their students learn, and when they have more time with students to accomplish their goals” (p. 194).

In terms of their ability to implement culturally-responsive community-building strategies like those described above, charter schools would seem to benefit from their status as schools of choice. Since parents must choose to apply to the schools under study, their investment in the school’s mission would likely be greater than that of

parents whose children attend schools to which they were assigned by the district. Such investment could be important to building the home-school communication advocated by Ogbu and Simons (1998) and Bryk and Schneider (2002) as a strategy to decrease mistrust of schools. SRI (1997) reports that among California charter schools a “high level of parent participation was a defining feature of charter schools” (p. II-9).

According to SRI (1997), examples of notable parent involvement at charter schools include parents serving on schools’ governing boards, high levels of parent participation in parent-teacher conferences, consistent parent monitoring of homework, and parents volunteering (sometimes as a requirement of students’ enrollment) at the school in a wide-variety of roles. Given that SRI (1997) included many suburban charter schools with more affluent parents in their California-wide survey, it will be interesting to discover whether the schools under study in this dissertation have achieved similarly high-levels of parent engagement despite the obstacles of economic disadvantages, large percentages of single parent households, and the cultural disidentification with school described by Ogbu and Simons (1998).

In serving predominantly African-American student populations, urban charter schools must confront the social and cultural issues raised by Ogbu and Simons (1998), Steele (1992), Steele and Aronson (1998), and Perry (2003). It will therefore be important to explore how the successful charter schools under study address the relationship between the psychological effects of students’ social experiences inside and outside school and their academic achievement. Similarly, this study must examine how these schools cultivate school cultures that support student achievement and whether they

implement community-building strategies such as those recommended by Hill, Foster, and Gendler (1990) and/or Darling-Hammond and Falk (1997).

### Summary

This dissertation tells the stories of three Boston charter schools that are using their autonomy with respect to budgets, staffing, curriculum and instruction, and school culture to bridge the achievement gap between African-American students and White students. The experiences of these schools are analyzed through the lens of the literature on educational practices effective in bridging the achievement gap and the charter schools literature. The foundation for the research design lies in four key assumptions supported by the research literature:

- Assumption # 1: Schools have the capacity to be effective in bridging the achievement gap between African-American students and white students. This assumption relies on the work of the effective schools researchers of the 1960s and 1970s (such as Brookover et al.,1979; Coleman et al.,1981; Edmonds,1979, 1986; Phi Delta Kappa,1980; Rutter et al.,1979; Weber, 1971) who focused on locating schools outperforming their demographic peers and identifying their unique characteristics, and the successor literature on practices effective in bridging the achievement gap which focuses more heavily on school culture (see Hill, Foster, & Gendler, 1990; Bryk, Lee, & Holland, 1993; Darling-Hammond, 1997).

- Assumption # 2: Standardized test scores provide a useful measure of the effectiveness of individual schools in bridging the achievement gap between African-American students and white students. Edmonds (1979) and Sizemore (1985) argue persuasively that in an educational landscape where schools are generally failing to bring African-American students, low-income students, and urban students to proficiency in basic skills, standardized test scores provide a useful minimum threshold for assessing school efficacy. This assertion is buttressed by the contemporary policy climate in Massachusetts in which school quality is evaluated via standardized test scores (per both the Massachusetts Education Reform Act of 1993 and the federal No Child Left Behind Act of 2001) and, more importantly, students must pass high school standardized tests in order to receive high school diplomas.
- Assumption #3: As a result of their autonomy – defined as freedom plus accountability – charter schools are uniquely positioned (i.e., differently positioned than traditional district school) to implement effective practices. The central thesis of charter school advocates such as Wilson (1992), Nathan (1999), and Finn, Manno, and Vanourek (2000) is that school-level autonomy will translate into improved student outcomes. The Massachusetts Education Reform Act of 1993 which launched the Massachusetts charter initiative explicitly describes the purposes of charter schools as including “to stimulate the development of innovative programs,” “to provide opportunities for innovative learning and assessments,” and “to provide teachers with a vehicle for establishing schools with alternative, innovative methods of educational

instruction and school structure and management.” There is a lively debate in the research community about whether charter schools are fulfilling their promise of facilitating the implementation of effective practices (see for example, Braun, Jenkins, and Grigg (2006); Burian-Fitzgerald, Luekens, and Strizek (2004); Hoxby (2004); Lubienski and Lubienski (2006); Miron and Nelson (2002); Peterson and Llaudet (2006); and Wohlstetter and Chau (2004)).

- Assumption #4: Decisions about budgets, staffing, curriculum and instruction, and school culture contribute to the effectiveness of three urban charter schools in bridging the achievement gap between African-American students and white students. There is a rich research literature linking improved outcomes for low income, urban, and African-American students to decisions about: (1) budgets (Cohen & Hill, 2000; Darling-Hammond, 1997, 1998, 2000; Darling-Hammond & Falk, 1997; Davis & Thomas, 1989; Elmore, 2002; Ferguson, 1998a; Finn & Achilles, 1999; Greenwald, Hedges, & Laine, 1996; Heath & McLaughlin, 1994; Miles, 1995; Mosteller, Light, & Sachs, 1996; Newmann et al., 2001; Nye, Hedges, & Konstantopoulos, 1999; Odden, 2000; Robinson, 1990; Sebring & Bryk, 2000; Shanahan, 1998; Shepard, 2000); (2) staffing (Elmore, 1995, 1999; Darling-Hammond, 1997; Darling-Hammond & Falk, 1997; Dreeban & Gamoran, 1986; Ferguson, 1998b; Fullan, 2002; Ogbu & Simons, 1998; Sebring & Bryk, 2000; Talbert & McLaughlin, 1994); (3) curriculum and instruction (Darling-Hammond, 1997; Elmore, 1995, 2002; Newmann et al., 2001; Ogbu & Simons, 1998; Shepard, 2000; Steele, 1992; Steele & Aronson, 1998); and (4)

school culture (Bryk & Schneider, 2002; Darling-Hammond & Falk, 1997; Hill, Foster, & Gendler, 1990; Ogbu & Simons, 1998; Steele, 1992).

The research methodology for this dissertation builds on these assumptions to develop case studies generated from empirical evidence gathered through review of published documents, interviews, and focus groups. The analysis chapter then identifies themes and patterns across the case studies.

### III -- METHODOLOGY

#### Introduction

The primary purpose of this dissertation is to examine and understand how three urban charter schools are using four key elements of charter school autonomy – budgets, staffing, curriculum and instruction, and school culture – to bridge the achievement gap between African-American students and white students. Typically, “basic research” in the social sciences uses empirical evidence to either evaluate existing theories or to construct new theories (Patton, 1990, p. 153). This dissertation builds on two bodies of literature in analyzing the experience of these three urban charter schools: (1) the literature on educational practices effective in bridging the achievement gap; and (2) the literature on charter schools – both scholarly research and advocacy.

#### Background

As described in Chapter II, early effective schools researchers (e.g. Brookover et al., 1979; Coleman et al., 1981; Edmonds, 1979, 1986; Phi Delta Kappa, 1980; Rutter et al., 1979; Weber, 1971, etc.) identified schools whose students were more successful on standardized tests of achievement than would be predicted by their student demographics and “through survey or case study methodology, they identified the characteristics of those schools that contributed to their unusual success” (Firestone, 1991a, p. 14). Effective schools researchers advocated such strategies as an intensive focus on literacy,

direct instruction, strong principal leadership in the areas of curriculum and instruction, and strict classroom management (Firestone, 1991, p. 5). Although the literature of effective schools resulted in numerous school change initiatives, the intended results were not generally achieved and the achievement gap for low-income students of color persisted. Many policymakers, including charter school supporters in Massachusetts, later attributed the failure of their reform efforts to intractable structural problems in education (e.g. unmanageable district bureaucracies, inflexible union contracts that protect ineffective teachers, etc.) (Hassel, 1999; Jacoby, 1994; Wilson, 1992). On the other hand, scholars such as Purkey and Smith (1983) and Rosenholtz (1985) emphasize the failure of the effective schools literature (and effective schools reform initiatives) to pay adequate attention to issues of school culture and the practices necessary to develop and sustain school cultures that support academic achievement. Thus, these researchers and subsequent scholars seeking to understand the practices of schools that succeed in bridging the achievement gap have concentrated on examining the internal processes by which these effective schools produce their results.

Recent research which focuses on identifying educational practices effective in raising student achievement, particularly the achievement of students in urban schools, has identified a variety of practices in the areas of budgets, staffing, curriculum and instruction, and school culture associated with improved educational outcomes. In analyzing the relationship between school budgets and student achievements, researchers identify the following as critical areas of investment: (1) smaller schools and smaller classes (Darling-Hammond, 1997; Ferguson, 1998a; Finn & Achilles, 1999; Greenwald, Hedges, & Laine, 1996; Mosteller, Light, & Sachs, 1996; Nye, Hedges, &

Konstantopoulos, 1999; Robinson, 1990); (2) reduced teacher loads that provide time for data analysis and reflection (Darling-Hammond, 1997, 1998, 2000; Darling-Hammond & Falk, 1997; Elmore, 2002; Miles, 1995; Shepard, 2000) (3) professional development carefully coordinated with curricular and instructional reforms (Cohen & Hill, 2000; Miles, 2001; Newmann et al., 2001; Odden, 2000; Sebring & Bryk, 2000); and (4) funding of programs that increase student learning time and expand student access to academic tutoring before school, during school, after school, and during the summer (Davis & Thomas, 1989; Heath & McLaughlin, 1994; Odden, 2000; Shanahan, 1998).

According to current scholarship, critical features of staffing patterns that promote student achievement include: (1) hiring teachers who have high expectations for students, a thorough understanding of how students learn and effective instructional methods, and content expertise (Elmore, 1995; Darling-Hammond, 1997; Darling-Hammond & Falk, 1997; Dreeban & Gamoran, 1986; Ferguson; 1998b; Ogbu & Simons, 1998); (2) creating dynamic roles and consistent learning opportunities for teachers that ensure their continued professional growth and encourage their persistence in the field (Darling-Hammond, 1997; Talbert & McLaughlin, 1994; (3) removing, either directly or indirectly, those teachers who fail to advance student achievement (Sebring & Bryk, 2000); and (4) hiring and/or developing school leaders who prioritize instructional leadership and the creation of collaborative staff cultures (Elmore, 1999; Fullan, 2002; Sebring & Bryk, 2000). In terms of curriculum and instruction, recent research links several critical features to improved academic results: (1) structures that support teaching for understanding and differentiated instruction (Elmore, 1995); (2) instructional coherence (Newmann et al., 2001; (3) continuous use of student performance data to

drive instructional improvements (Darling-Hammond, 1997; Elmore, 2002; Shepard, 2000); (4) internal assessment systems designed to yield rich data on student knowledge and skills (Shepard, 2000); and (5) culturally responsive curricula (Ogbu & Simons, 1998; Steele, 1992; Steele & Aronson, 1998). School culture is an area of particular interest for researchers focused on the achievement gap and they offer several strategies for developing cultures that facilitate the bridging of the achievement gap including: (1) structures that support the development of trusting relationships between students and school staff (Ogbu & Simons, 1998; Steele, 1992) (2) academic and social interventions that directly address the tension between the cultural experience of institutional oppression and/or discrimination and the goal of success within educational institutions (Ogbu & Simons, 1998; Steele, 1992) (3) cultivation of safe, academically rigorous, and respectful environments (Darling-Hammond & Falk, 1997; Hill, Foster, & Gendler, 1990); and (4) trust-building home-school communication (Bryk & Schneider, 2002; Ogbu & Simons, 1998). Without question, the blueprint offered by recent scholarship in education for the creation of schools effective in bridging the achievement gap requires changes in educational practice significantly more complex and organic than those proposed by the early effective schools researchers. Thus, many policymakers argue that successful implementation of such reforms necessitates dramatic change in school governance structures.

Charter school advocates such as Manno, Finn, Bierlein, and Vanourek (1998) and Nathan (1999) offer charter schools as a strategy for addressing the achievement gap that relies upon a structural transformation in the governance of schools. These charter school proponents attribute the failure of past reform efforts to two specific structural

problems in education: a lack of sufficient school-level freedom and a lack of sufficient school-level accountability. They argue that the freedom afforded by charter school status provides the necessary context for successful adoption of innovative strategies for raising student achievement. In addition, Nathan (1999) stresses that the accountability of charter schools, for producing results in terms of student achievement and for attracting parents, serves as a powerful incentive to implement strategies that work. Unfortunately, while charter school proponents frequently cite charter school success stories, there is not a significant body of research on what takes place within successful charter schools. Much scholarly research on charter schools focuses on analysis of aggregate data from statewide or national studies to evaluate whether there is a correlation between improved achievement and charter status (American Federation of Teachers, 2002; Bifulco & Ladd, 2004; Braun, Jenkins, & Grigg (2006); Finn, Manno, & Vanourek, 2000; Gill et al., 2001; Hoxby, 2004; Loveless; 2003; Lubienski & Lubienski (2006); Massachusetts Department of Education, 2006; Miron, 2005; Miron & Nelson, 2001; Miron, Wygant, Cullen, & Applegate, 2006; Peterson & Llaudet (2006); SRI International, 1997; UCLA, 1998; Zimmer & Buddin, 2005). Research that examines life within charter schools often describes the missteps of charter school leaders and unsuccessful charter school efforts to raise the achievement of low-income students of color (Fuller, 2000; Good & Braden, 2000; Sarason, 1999). Thus, relatively little is known about how successful charter schools are using their charter status – particularly their autonomy in budgets, staffing, curriculum and instruction, and school culture – to achieve positive results for African-American students. This study seeks to address this

gap in both the literature on educational practices effective in bridging the achievement gap and the literature of charter schools.

Given that educators and politicians from across the ideological spectrum increasingly embrace charter schools as a strategy for raising the achievement of low-income urban students of color (Finn et. al., 2000; Price,1999), it is imperative that the educational research community examine the phenomenon of successful charter schools. Exploring the practices of successful charter schools will make it possible to assess the extent to which these schools are using their charter status to implement the educational practices identified by educational researchers as effective in bridging the achievement gap. The experience of these schools will also provide insights into how accurately the literature of charter schools predicts how charter status might be used to raise student achievement. Most importantly, the stories of these schools will provide other charter school founders, charter school leaders, and charter school teachers with an understanding of the unique culture processes at work in each school.

### Methodological Design

In contrasting quantitative and qualitative research, Maxwell (1996) asserts, “Quantitative researchers tend to be interested in whether and to what extent variance in x causes variance in y. Qualitative researchers, on the other hand, tend to ask how x plays a role in causing y, what the process is that connects x and y” (p. 20). This dissertation, in the tradition of qualitative research (but with the inclusion of both qualitative and quantitative data), will explore the relationship between four key components of charter

school autonomy – budgets, staffing, curriculum and instruction, and school culture – and improved student outcomes for African-American students at three Boston charter schools. Thus, the intent of this study is not to demonstrate that charter schools are inherently more capable of bridging the achievement gap than district schools, but instead to explore how these three successful schools have put their charter status to use in bridging the achievement gap.

The advantage of an in-depth study of three charter schools as opposed to a broader survey of a large number of charter schools is the capacity of case studies to provide a depth of understanding of the interaction of real-world organizational actors and elements not attainable through surveys or experimental designs (Maxwell, 1996; Patton, 1990; Yin, 1994). Indeed, the argument advanced by Rowan, Bossert, and Dwyer (1983) that “fine-grained analyses of the processes within schools are needed more than analyses of global differences between schools” is as true for urban charter schools today as it was for urban district schools two decades ago (p. 29).

#### Units of Analysis: Unlocking the Black Box

Patton (1990) argues that the chief determinant of the appropriate unit of analysis is “what it is you want to be able to say something about at the end of the study” (p.168). As discussed in Chapter II, this dissertation seeks to fill gaps in both the literature on educational practices effective in bridging the achievement gap and charter schools literature resulting from the failure to thoroughly explore the “black box” of schooling – the interplay of budget, staffing, curriculum and instruction, and school culture that shape

teaching and learning to affect student achievement. By creating case studies of these three schools, it is possible to both describe these interconnected aspects of the functioning of each school and to compare and contrast elements of life within the three schools. Mackenzie (1983), in his critical review of the literature of effective schools, anticipates just this type of research when he writes, “[I]t remains for a new generation of studies to record the process of school improvement in enough detail to permit a clinical, if not an ethnographic, analysis with which to verify the utility as well as the validity of our working concepts. At last, it is nearly time to taste the pudding” (p. 14).

Although charter school proponents have been criticized for extrapolating too much from charter school case studies, there is no question that there is a need for more case study research to reveal what actually takes place within individual schools. Indeed, Sarason (1998) blames our lack of knowledge about how charter schools can avoid the pitfalls facing new institutions on the failure of policymakers to include financial commitments to research within charter school legislation. He laments that, “no legislation, national or state, included funds to observe and record in an independent, dispassionate way the ‘story’ of the school[s]” (Sarason, 1998, p. 52-53). In fact, in Sarason’s view the charter school movement will fall short because although some schools will succeed, “as things are now, we will never know why they succeeded, just as we will not know why those that fell far short of their mark, or completely failed, had the fate they will have” (p. 64).

Charter school proponents Nathan (1999) and Finn et al. (2000) claim to address this gap in their work. Nathan (1999) dedicates a chapter of his book to a tour of charter schools, asserting, “Theories, political battles, and legislation are interesting. But in the

end, what matters most in education is what happens to young people day to day” (p. 23-24). Finn et al. (2000) describe the wide range of questions those interested in charter schools would like to have answered: “Who starts them? Who attends them? Why do people seek them? How do they work? How are they different from other schools? How are they doing?” They do not, however, attempt to answer these questions with a broad quantitative study of the key features of charter schools nationally, or even within a given state. Instead, they argue, “Generalizations are difficult, for these schools are breathtakingly diverse. There is no ‘typical’ example. Accordingly, the best way to begin to answer all these questions is to tour several actual [charter schools]” (Finn et al., 2000, p. 23-25). However, their efforts are perhaps compromised by their strong advocacy for charter schools that may lead to charges that they overstate the benefits of charter status or understate weaknesses among charter schools.

Beyond the proponents, other charter school researchers who are neutral or even critical also use case studies to supplement or deepen findings in large-scale qualitative studies. SRI (1997), a charter school evaluation commissioned by the state of California, relied on case studies to “describe in greater detail the features of charter schools uncovered in the surveys” they conducted (p. I-6). UCLA (1998) offers as a rationale for developing qualitative case studies of ten districts and their charter schools the need to “move the debate on charter school reform beyond global generalizations of whether charter school reform is ‘working’ into a more thoughtful discussion of when it is working and for whom” (p. 15). Similarly, Brouillette (2002) explains her use of case studies to explore charter schools by arguing, “a number of large scale studies have already been done. What has been lacking is the in-depth examination of specific cases

in an effort to learn from early successes and failures” (p. xii). Charter school skeptic Bruce Fuller (2000a) also chose to use case studies in order to take an in-depth look at life within charter schools. Fuller (2000a) offers this simple rationale for case study research: “The hope and hype around charter schools has been so colorful and pervasive, yet most people have had slight opportunity to actually step inside a school, look around, and see what this educational promised land is all about” (p. 6). He asks, “Don’t we want to know why effective charter schools are able to boost achievement beyond expectations based on their kids’ socioeconomic characteristics?” (2000b, p. 41) This dissertation, in essence, seeks to answer this question by telling the story of three schools that are doing just that. Indeed, this dissertation seeks to address in part the paucity of case study research specifically focused on effective charter schools, particularly schools succeeding in bridging the achievement gap.

Thus, three charter schools – Academy of the Pacific Rim Charter School (APR), Neighborhood House Charter School (NHCS), and Roxbury Preparatory Charter School (RPC) – are the units for analysis. This focus makes it possible to ask important *school-level* questions:

- Budgets: How, if at all, do the case study schools allocate their resources to advance student achievement?
- Staffing: How, if at all, do the case study schools recruit, support, evaluate, and retain school staff to advance student achievement?
- Curriculum and Instruction: How, if at all, do the case study schools develop, assess, and refine their curricula to advance student achievement?

- School Culture: How, if at all, does each of the case study schools cultivate and sustain a student, parent, and staff culture to advance student achievement?

Data was collected about the three charter schools through school level actors – school leaders, trustees, teachers, parents, and students (in the case of Roxbury Prep) – from each site. Although each of these actors is involved in very different ways in each of the four areas under study, they are core participants in the operation of these successful charter schools.

It is worth noting that although this is a study of three charter schools, and not a comparative study of the three charter schools and the Boston Public School District, information on district schools is used as an additional unit of analysis to help identify the practices of the three charter schools that are distinctive.

### Sampling Strategy

This dissertation, like much of the effective schools literature, is based on what Patton (1990) calls “extreme or deviant case sampling.” In this methodological approach, the researcher selects information-rich extraordinary cases that can illuminate elements of program success and provide a crucial test of relevant theory (Maxwell, 1996; Patton, 1990). The three schools to be studied are “deviant” in two crucial respects: significant public recognition and high student achievement.

The three schools to be studied – Academy of the Pacific Rim Charter School (hereafter, APR), Neighborhood House Charter School (hereafter, NHCS), and Roxbury

Preparatory Charter School (hereafter, RPC) - are deviant from other charter schools in that they have been identified by charter school proponents (e.g. foundations, politicians, the media, lobbying organizations, the Massachusetts Department of Education Charter School Office) as successful models. For example, in addition to being highlighted in Finn et al. (2000) as a result of impressive student achievement results, APR's unique educational approach has been highlighted in the *Boston Globe* and *Teacher Magazine* (Cohen, 2001; Hartigan, 2001; Vaishnav, 2001). APR and its strong MCAS scores are also praised in a 2001 United States Department of Education-funded report entitled "Smaller, Safer, Saner, Successful Schools" (National Clearinghouse, 2001). NHCS has also been singled out in the news media for MCAS scores significantly higher than other Boston public schools (Hart, 1998). The achievements of RPC students have received the attention of the United States Department of Education Assistant Secretary for Elementary and Secondary Education, the *Boston Herald*, the *Boston Globe*, and the United States Department of Education Office of Innovation and Improvement (Hayward, 2002; Pappano, 2002; U.S. Department of Education, 2004). Beyond these acknowledgements, all three of these schools have been selected by the Massachusetts Charter School Resource Center (MCSRC) as placements for Charter School Fellows, individuals selected for a yearlong salaried training program in charter school development because of their potential for educational leadership. As part of their preparation for submitting charter applications to the Massachusetts Department of Education, these Fellows spend a semester interning at what the MCSRC labels "top quality" charter schools (Massachusetts Charter School Resource Center, n.d.).

The schools to be studied are also deviant from other urban public schools (both charter and district) in that they have significantly outperformed other urban schools in producing academic results for African-American students, as measured by raw scores on the Massachusetts Comprehensive Assessment System tests in English Language Arts and Mathematics (See Tables 3.1a, 3.1b, 3.1c, & 3.1d). MCAS tests are mandatory statewide assessments designed to measure students' progress toward the Massachusetts Curriculum Standards in English Language Arts, Mathematics, Science, and History. It is important to note that these tests are far more elaborate assessments of academic performance than the multiple-choice tests relied upon by early effective schools researchers to identify successful schools. While each test has a multiple-choice section, the MCAS tests are designed to assess a wider range of skills. For example, the 8<sup>th</sup> grade math test asks students to both show their work and describe their strategies in answering complex, multi-step problems. The 7<sup>th</sup> grade English test includes open response questions requiring students to use evidence from a given text and a composition section in which students must write a coherent and thoughtful essay in response to a prompt. Given that 10<sup>th</sup> grade students must earn scores of Proficient or Advanced on the English Language Arts and Mathematics MCAS tests in order to earn a high school diploma in the state, performing at the Proficient or Advanced level on the MCAS tests in these subject areas constitutes a – and perhaps “the” – pivotal measure of “academic success” as defined by the Commonwealth of Massachusetts. In addition, the impressive MCAS results of these three schools are confirmed by impressive student gains on the Stanford 9, a multiple-choice test of basic skills more similar to the tests relied upon by effective schools researchers.

**Table 3.1a****2005, 2006, 2007 7<sup>th</sup> Grade ELA MCAS Data for MA, Boston, RPC, NHCS, & APR:  
% Proficient or Advanced (By Race & Income)**

Population	2005				2006				2007			
	All	White	Af-Am	Low Inc	All	White	Af-Am	Low Inc	All	White	Af-Am	Low Inc
Massachusetts	66	73	41	41	65	72	43	41	69	76	48	46
Boston	44	74	36	38	43	72	36	37	49	72	41	43
Academy of the Pacific Rim	68	58	69	69	72	63	73	72	78	88	76	75
Neighborhood House	100	N/A	100	100	82	N/A	75	79	54	N/A	50	50
Roxbury Preparatory	81	N/A	82	75	77	N/A	76	82	86	N/A	84	83

**Table 3.1b****2005, 2006, 2007 8<sup>th</sup> Grade ELA MCAS Data for MA, Boston, RPC, NHCS, & APR:  
% Proficient or Advanced (By Race & Income)**

Population	2006				2007			
	All	White	Af-Am	Low Inc	All	White	Af-Am	Low Inc
Massachusetts	74	81	53	51	75	83	56	54
Boston	54	80	49	49	55	80	48	50
Academy of the Pacific Rim	76	73	74	74	77	83	75	70
Neighborhood House	74	N/A	77	70	84	N/A	79	81
Roxbury Preparatory	91	N/A	96	84	92	N/A	96	91

Note: This test was first administered in 2006.

**Table 3.1c****2005, 2006, 2007 7<sup>th</sup> Grade Math MCAS Data for MA, Boston, RPC, NHCS, & APR:  
% Proficient & Advanced (By Race & Income)**

Population	2006				2007			
	All	White	Af-Am	Low Inc	All	White	Af-Am	Low Inc
Massachusetts	40	46	14	17	46	52	20	22
Boston	22	46	11	17	26	45	16	20
Academy of the Pacific Rim	53	53	46	48	47	56	40	41
Neighborhood House	36	N/A	38	37	28	N/A	22	24
Roxbury Preparatory	58	N/A	45	54	72	N/A	68	69

Note: This test was first administered in 2006.

**Table 3.1d****2005, 2006, 2007 8<sup>th</sup> Grade Math MCAS Data for MA, Boston, RPC, NHCS, & APR:  
% Proficient or Advanced (By Race & Income)**

Population	2005				2006				2007			
	All	White	Af-Am	Low Inc	All	White	Af-Am	Low Inc	All	White	Af-Am	Low Inc
Massachusetts	39	<b>45</b>	<b>14</b>	17	40	<b>46</b>	<b>17</b>	17	45	<b>52</b>	<b>19</b>	21
Boston	23	45	<b>12</b>	18	23	46	<b>14</b>	18	27	52	<b>14</b>	23
Academy of the Pacific Rim Neighborhood House	52	58	<b>48</b>	44	50	67	<b>45</b>	40	56	61	<b>50</b>	55
Roxbury Preparatory	75	N/A	<b>69</b>	61	66	N/A	<b>65</b>	65	37	N/A	<b>29</b>	31
	82	N/A	<b>78</b>	78	90	N/A	<b>93</b>	91	94	N/A	<b>92</b>	91

A comparison of the English Language Arts and Math MCAS performance of African-American students at Academy of the Pacific Rim, Neighborhood House, and Roxbury Prep with the performance of White and African-American students state-wide, and with White and African-American students in the Boston Public Schools, provides compelling evidence that the three schools are succeeding in bridging – in some cases quite dramatically – the achievement gap (defined here as the percentage of students scoring Proficient or Advanced):

- On the 2005 7<sup>th</sup> grade ELA MCAS test, the gap in the percentage of White students state-wide and African-American students state-wide scoring Proficient or Advanced was 32 points, and the gap between White students state-wide and African-American students in Boston was 37 points. By contrast, the percentage of APR African-American students scoring Proficient or Advanced was only 4 percentage points below White students state-wide, the percentage of RPC African-American students scoring Proficient or Advanced was 9 points higher

than for White students state-wide, and the percentage of NHCS African-American students scoring Proficient or Advanced was 27 points higher than for White students state-wide.

- On the 2006 7<sup>th</sup> grade ELA MCAS test, the gap between the percentage of White and African-American students state-wide scoring Proficient or Advanced was 29 points, and the gap between White students state-wide and African-American students in Boston was 36 points. At APR, however, the percentage of African-American students scoring Proficient or Advanced was 1 point higher than for White students state-wide. The percentage of NHCS African-American students scoring Proficient or Advanced was 3 points higher than for White students state-wide, and the percentage of RPC African-American students scoring Proficient or Advanced was 4 points higher than for White students state-wide.
- On the 2007 7<sup>th</sup> grade ELA MCAS test, the state-wide gap in the percentage of White students and African-American students scoring Proficient or Advanced was 28 points and the gap between White students state-wide and African-American students in Boston was 35 points. By contrast, the percentage of APR African-American students scoring Proficient or Advanced was equal to the percentage for White students state-wide, NHCS African-American students narrowed the gap to 26 points, and the percentage of RPC African-American students scoring Proficient or Advanced was 8 points higher than for White students state-wide.
- On the 2006 8<sup>th</sup> grade ELA MCAS test, the gap between the percentage of White and African-American students state-wide scoring Proficient or Advanced was 28

points and the gap between White students state-wide and African-American students in Boston was 32 points. On the same test, APR African-American students narrowed the gap to 7 points, NHCS African-American students narrowed the gap to 4 points, and the percentage of RPC African-American students scoring Proficient or Advanced was 15 points higher than for White students state-wide.

- On the 2007 8<sup>th</sup> grade ELA MCAS test, the gap in the percentage of White students state-wide and African-American students state-wide scoring Proficient or Advanced was 27 points and the gap between White students state-wide and African-American students in Boston was 35 points, but APR African-American students narrowed the gap to 8 points, NHCS African-American students narrowed the gap to 4 points, and the percentage of RPC African-American students scoring Proficient or Advanced was 13 points higher than for White students state-wide.
- On the 2006 7<sup>th</sup> grade Math MCAS test, the gap in the percentage of White students state-wide and African-American students state-wide scoring Proficient or Advanced was 32 points and the gap between White students state-wide and African-American students in Boston was 35 points. However, the percentage of APR African-American students scoring Proficient or Advanced was equal to the percentage for White students state-wide, NHCS African-American students narrowed the gap to 8 points, and RPC African-American students narrowed the gap to 1 point.

- On the 2007 7<sup>th</sup> grade Math MCAS test, the state-wide gap in the percentage of White students and African-American students scoring Proficient or Advanced was 32 points and the gap between White students state-wide and African-American students in Boston was 36 points, but APR African-American students narrowed the gap to 12 points, NHCS African-American students narrowed the gap to 30 points, and the percentage of RPC African-American students scoring Proficient or Advanced was 16 points higher than for White students state-wide.
- On the 2005 8<sup>th</sup> grade Math MCAS test, the gap in the percentage of White students state-wide and African-American students state-wide scoring Proficient or Advanced was 31 points and the gap between White students state-wide and African-American students in Boston was 33 points. Comparatively, the percentage of APR African-American students scoring Proficient or Advanced was 3 points higher than for White students state-wide, the percentage of NHCS African-American students scoring Proficient or Advanced was 24 points higher than for White students state-wide, and the percentage of RPC African-American students scoring Proficient or Advanced was 33 points higher than for White students state-wide.
- On the 2006 8<sup>th</sup> grade Math MCAS test, the gap in the percentage of White and African-American students state-wide scoring Proficient or Advanced was 29 points and the gap between White students state-wide and African-American students in Boston was 32 points. By contrast, APR African-American students narrowed the gap to 1 point, the percentage of NHCS African-American students scoring Proficient or Advanced was 19 points higher than for White students

state-wide, and the percentage of RPC African-American students scoring Proficient or Advanced was 47 points higher than for White students state-wide.

- On the 2007 8<sup>th</sup> grade Math MCAS test, the percentage of White students state-wide scoring Proficient or Advanced was 33 percentage points higher than the percentage of African-American students state-wide, and the gap between White students state-wide and African-American students in Boston was 38 percentage points, but APR African-American students narrowed the gap to 2 points, NHCS African-American students narrowed the gap to 23 points, and the percentage of RPC African-American students scoring Proficient or Advanced was 40 points higher than for White students state-wide.

Challenges to the sampling approach employed in this dissertation may come in two forms: first, the argument that that the success of these three schools has less to do with the curriculum, budget, staffing, culture, or other aspects of each school's operation, than with their unique student populations; and second, the notion that lessons drawn from three isolated cases are not sufficiently generalizable. Critics often argue that charter schools benefit from selection bias; in other words, charter school students tend to be the children of more motivated parents because those parents sought out an alternative to the zoned school (AFT, 2002; Fuller, 2000a; Good & Braden, 2000; Molnar, 1996; UCLA, 1998). For example, UCLA (1998) found that in California, "[c]harter schools exercise considerable control over the type of students they serve. Thus, in some cases charter schools have more choice than do parents" (p. 5). The Massachusetts charter school law (MGL Chapter 71 § 89, 1993) does not allow schools to evaluate prospective