# Leaving Children Behind: School Culture and Inter-District School Choice

by

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#### **Abstract**

One requirement of the No Child Left Behind Act is that schools identified as "needing improvement" must grant their students the opportunity to attend higherperforming schools in the same district. Recently, some policymakers have suggested that the choice program be expanded to include schools in other districts. In Massachusetts, inter-district school choice has been an option for all students, regardless of the achievement status of their schools, since 1991. The prevailing assumption of such policies is that allowing students in underperforming schools to leave will help those students to achieve better results elsewhere. But what impact does school choice have on students that are left behind, particularly in relation to student motivation? The aim of this thesis is to examine the relationship between inter-district school choice and college aspirations. Massachusetts is used as a case study to examine the effects of increased inter-district school choice on the motivation of those students that are left behind in struggling districts. The results of the correlational data analyses suggest a feedback mechanism wherein students flee failing districts, adversely affecting school culture in the districts they abandon, in turn prompting more students to transfer out and failing districts to struggle more. Whereas most of the research on school choice to date has focused on the impact upon "receiving" districts, this study suggests that further research examining the effects on "sending" districts is warranted, before any of the proposed policy changes regarding inter-district school choice are enacted.

# Leaving Children Behind:

#### School Culture and Inter-District School Choice

Thirty years ago, the primary impetus for educating our children was to ensure that future generations would cement the United States' position as an intellectual superpower in the international arena. A 1983 report to the Secretary of Education by the National Commission on Excellence in Education, titled "A Nation at Risk," affirmed the Secretary's feeling that nation-wide there was "the widespread public perception that something [was] seriously remiss in our educational system" (Gardner et al., 1983, p. 1). The report noted that this public opinion had arisen due to the United States' "once unchallenged preeminence in commerce, industry, science, and technological innovation" being overtaken by international competitors (Gardner et al., 1983, p. 5). Failures in education were seen as the most affective causes of this problem, and these failures undergirded "American prosperity, security, and civility" (Gardner et al., 1983, p. 5).

The American government, reacting to these grievances about the condition of public education, enacted corrective reforms aimed at bolstering the intellectual competitiveness of American students as compared to children from other countries. The Goals 2000: Educate America Act, signed into law on March 31, 1994, more clearly links weak performances in the international arena to inequities in the American educational system. The Act mandates that public education provide students with literacy skills and the knowledge to compete in a global economy and exercise the rights and responsibilities of citizenship. More particularly, United States public education should strive to make American students first in mathematics and science achievement (Goals 2000: Educate America Act, 1994). The Act posited that

unless every student was given the opportunity to reach his or her full potential, the United States would continue to see its international standing fall. Disadvantaged students were viewed as an untapped resource in striving to obtain unsurpassed prosperity and security.

Since 1994, public perceptions about the overarching purpose of public schooling have shifted slightly. We no longer solely view children as vehicles through which we may achieve nationally hegemonic goals. Rather, we educate children largely for their own sake, so that they may enjoy the opportunities afforded them by knowledge within United States borders ("A Nation Accountable," 2008). We endeavor to impart to all children information about events that have occurred in history, scientific phenomena, different modes of communication, and critical thinking. We hope that they will use this familiarity with the world to seek higher education and attain better-paying jobs, eventually achieving social mobility. This shift in theory behind the purpose of education is subtly reflected in more recently enacted legislation. Rather than primarily striving to produce a few intelligent individuals to help advance the United States' international standing, policymakers are trying to close achievement gaps and equalize access to high-quality schooling. An example of how this sentiment has manifested itself in legislation is seen in the phrasing of the "statement of purpose" of Title I of the No Child Left Behind Act (NCLB) of 2001. The authors state succinctly that they seek to "ensure that all children have a fair, equal, and significant opportunity to obtain a high-quality education" (No Child Left Behind Act, 2008). NCLB as a whole focuses primarily on discrepancies in education across demographic groupings and state lines, rather than across international borders.

As evidenced, recent education policies have a more domestic focus. It is posited that "standards-based reform" – making sure that every child reaches prescribed levels of achievement – is the key to promoting social mobility in American society. However, NCLB, the most influential legislation on the books today with regard to education, includes some controversial policies on accountability and school improvement. For instance, it mandates that every disadvantaged, underperforming school offer intra-district school choice to its students. Students in a failing school that is recognized as serving an at-risk population must be allowed to transfer to a higher-performing school in the same district, if one exists, with the local educational agency (school district) covering the costs of tuition and transporting choice students to their new schools (No Child Left Behind Act, 2008). This practice further depletes the resources of the struggling districts, and further disadvantages those students that are left behind. "Resources" here are not only measured financially; this thesis argues that seeing an academically motivated student flee a failing school has an adverse effect on his peers that extends far beyond the money he takes with him. Left with lower aggregate test scores and fewer academic role models, the students deserted in failing schools face bleak prospects.

Intra-district school choice is regarded as an underutilized and ineffective provision of NCLB, largely because most districts containing one failing school do not also contain higher-achieving, more appealing options for students looking to transfer (Bathon & Spradlin, 2007). Because of this, some call for an additional

provision to be added to NCLB's list of sanctions for disadvantaged, failing schools: mandatory inter-district school choice. That is, students would be allowed to select higher-performing schools in different districts to which to transfer (Kozol, 2007).

This thesis examines the potential implications of the proposed amendment to NCLB that would expand the school choice program from an intra-district to an inter-district program. First, literature related to the history of NCLB and its school choice provision is reviewed. Then, Massachusetts – a state that has had a voluntary inter-district school choice program in place since 1991 – is used as a case study to examine the effects of increased inter-district school choice on those students who are left in underperforming districts.

#### **Literature Review**

Reasons for hypothesizing that mandatory inter-district choice would have an adverse effect on students who do not transfer are explored in this section. Relevant literature on NCLB and its high-stakes testing mandates is presented first, in support of the assertion that the accountability movement has led students in underperforming schools to seek ways out. Concretely labeling some schools as "failing" has prompted increasing numbers of students to participate in existing choice programs, even as debates over the arbitrariness of the "failing" label, differences across states in how "failure" is defined, and the liberalness with which the label is applied rage on.

Students may escape "failing" schools via intra-district choice, mandated by NCLB for disadvantaged students in underperforming schools. Existing choice programs in some states also include voluntary inter-district choice, but there are practical

limitations on these programs as well as on the NCLB provision. These limitations have prompted reform advocates to call for an expansion of the choice provisions in NCLB to include inter-district choice, which has potentially adverse ramifications in terms of school culture for districts that lose students to other districts. "College aspiration" as a predictor of student motivation, and therefore of "school culture," is discussed, along with relevant research pertaining to the influence that school culture can have on students immersed in it. Finally, the feasibility of using Massachusetts as a case study to examine the effects that increased rates of inter-district school choice can have on "sending" districts is explored.

# **Accountability and Standards-Based Reform**

NCLB, President George W. Bush's signature education policy, includes several controversial provisions on accountability. On its surface, proponents claim that NCLB was meant to equitably improve public education in the United States, as well as close the achievement gap between white and minority students (S. Dillon, 2010). The Act mandates the implementation of standardized assessment systems in every state, intended to incite schools to provide higher-quality education for their students. The call for standardized assessment is in line with the standards-based reform movement that has taken place in the United States over the past two decades. Students' performance on these NCLB-mandated standardized tests is used to assess the quality of the education they are receiving, as well as how prepared they are to graduate and go on to thrive in the workforce. In many states – twenty-four thus far – testing programs culminate in high school exit exams, administered mostly in the

tenth or eleventh grades, which students must pass in order to graduate (Zhang, 2009).

Norm-referenced vs. criterion-referenced testing. Qualitative assessment is problematic at the policy-making level, and it is argued that the only way to accurately compare children and schools and school districts, and to justifiably allocate blame when a graduate proves himself to be less qualified than his peers upon entering the job market, is to administer a standardized test of achievement. The call for the development and administration of such exams has sparked an enduring debate over what the overarching purpose of such tests should be (Taylor, 1994). Some say the primary purpose of these tests should be to determine whether students are achieving desired standards of performance (tests should be "criterion-referenced"), while others maintain that they should provide relative measurements of students, schools, districts, and states on scales of achievement (tests should be "norm-referenced").

Though NCLB's assessment systems are said to be "standards-based," in practice there are rampant ambiguities as to what the administered tests are measuring, and as to what information can validly be extrapolated from test results. Often, states use a single test to serve both norm- and criterion-referenced purposes. This can have some unfortunate consequences. As noted by Catherine Taylor in her review of literature on large-scale assessment reform, using norm-referenced achievement tests for criterion referenced-purposes leads to norm-referenced score inflation and an erosion of standards (1994).

Concerns related to unresolved norm- vs. criterion-referenced issues in NCLB testing programs have been raised. Skeptics draw on evidence of discrepancies, invalidity, and ineffectiveness in testing programs (Finn, Petrilli, & Vanourek, 2006) when commenting on the feasibility of appropriately interpreting test results and using them to inform policy changes.

Effect of NCLB accountability systems on learning. Adverse consequences of high-stakes testing have been demonstrated in research. Skeptics raise questions about whether subjecting students to high-stakes tests is positively affecting learning. They hold that devoting time to teaching test-taking skills, for example, often prevents teachers from imparting to students the knowledge and skills they need to succeed in the workforce (Au, 2007). One major consequence has been that core curriculum flexibility has decreased, leaving classroom teachers with less time to present longer pieces of literature or go into topics in depth with their students. Ambiguities surrounding NCLB standards, which are determined by individual states, also detract from effective learning. In 2008, the American Federation of Teachers examined state standards in four core content areas (English, mathematics, science, and social studies) posted on state web sites as of October 2007 for all 50 states and for Washington, D.C. They analyzed the standards using a set of criteria intended to determine whether they contained enough information about what students should learn to provide the basis for coherent curricula and assessments. Their major findings were that there is a lack of strong standards in most states, and that there is variation by level – middle school standards are stronger than high school standards, as high school standards tend to be clustered instead of being grade or course specific. Teachers end up not understanding what students should have learned in previous grades, what they are expected to impart in current the grade, or what they are preparing students to learn in subsequent years (American Federation of Teachers, 2008).

Additionally, students who perform poorly on assessments are often placed in remediation programs, receiving a "double-dose" of the same subject. Because these programs are generally of questionable effectiveness, this is arguably a gross waste of resources (Zabala, Minnici, & Kober, 2007).

## Making or Breaking Opportunities: NCLB's High School Exit Exams

Students' abilities to pass high-stakes tests – specifically, NCLB's high school exit exams – are said to be good predictors of whether or not they have the skills to go on and pursue higher degrees and fulfill their maximum earning potentials. Advocates have argued that by assuring that holding a high school diploma means that a student has mastered state-defined academic curricula, the examinations increase the economic value of a high school diploma (Evers & Walberg, 2002). Opponents, by contrast, have countered that there has been little evidence that high school exit exams positively affect labor force status or earnings, and thus they are a waste of education and human resources, harmful to those who fail and not beneficial to those who pass (Bracey, 2009). Indeed, though a major argument for the implementation of exit exams is to ensure that public school graduates are ready for college, only eleven out of twenty-four participating states succinctly state that this is what their tests are intended for (Zhang, 2009).

**Effects on individual students.** The current trend in research to explore only aggregate patterns in achievement may obscure heterogeneities in effects for different groups of students (Papay, Murnane, & Willett, 2008). Indeed, a 2006 study by Dee & Jacob using data from the 2000 Census Public Use Microdata Sample (2000 PUMS) and the National Center for Education Statistics' Common Core of Data (CCD) suggests that the effects of NCLB reforms have not been homogeneous. The study's results demonstrated that exit exams significantly reduced the probability of completing high school, particularly for black students. Similarly, analysis of gradelevel dropout data from the CCD indicates that the implementation of exit examinations in Minnesota increased the dropout rate in urban and high-poverty school districts as well as in those with a relatively large concentration of minority students. This increased risk of dropping out was concentrated among 12<sup>th</sup> grade students. Dee & Jacob also found that Minnesota's exit exam lowered the dropout rate in low-poverty and suburban school districts, particularly among students in the 10<sup>th</sup> and 11<sup>th</sup> grades. The authors conclude that exit exams have the capacity to improve student and school performance, but appear to have exacerbated inequality between demographic subgroups.

Measuring the effectiveness of high school exit exams. Those who endorse their existence maintain that the examinations create incentives for disadvantaged students to realize their potential ("Great Expectations," 2009). Opponents of the testing policies, in contrast, have been building an increasingly strong case for their abolition. As 2014, the year by which all subgroups of students in all states are supposed to reach 100 percent proficiency in English/Language Arts and mathematics

(No Child Left Behind Act, 2008), looms nearer, dissenters have collected data that suggest that NCLB has not been as effective at improving the state of public education as policymakers hoped at the turn of the century. Researchers and state education officials predicted in the early 2000s that a high percentage of schools would fail to meet the accountability provisions, which would overwhelm the capacity of state education agencies to help low-performing schools (Owens & Sunderman, 2006). It was also predicted that the changes the law called for were so extreme that several provisions would change before the full effect of the requirements were felt, and that would make it difficult to empirically determine exactly which provision was having what effect on students. These hypothetical concerns turned into real problems as time wore on. Over the last nine years, the Department of Education was forced, in the face of mounting political opposition, to relax its criteria on which schools were qualified as "needing improvement" under the law. The law also requires higher proficiency standards now and testing in more grades than it did in the first years of implementation, complicating year-by-year comparisons and making it difficult to determine the true academic performance of a state.

A 2008 study by McNeil, Coppola, Radigan, & Vasquez-Heilig examined the effects of the well established high-stakes test-based accountability system in Texas – which was the model for the NCLB assessment systems – on the severity of the dropout problem, and found that dropout rates are highest amongst minority populations. Though this study has been criticized as extrapolating too much significance from one district and for claiming causality on the basis of only one case

study (Wilkins, 2008), the impact of high-stakes testing on minority and underprivileged public school students has been empirically examined by other researchers and found to be of major concern (Rentner, 2006b).

In addition, the pressure of taking these high-stakes examinations does not equally affect all students. In 2005, researchers at the Arizona State University Education Policy Research Unit investigated the extent to which the pressure of highstakes testing influences students' academic performance. To account for the differences in testing pressure among the states, the researchers created a Pressure Rating Index (PRI), which sought to capture the amount of pressure or "threat" associated with performance on a particular test. The index was developed by reviewing state legal requirements, interviewing state officials, and consulting media sources. The degree of pressure associated with specific state tests was determined by groups of graduate-level education students. The researchers analyzed correlations between the PRI and National Assessment of Educational Progress (NAEP) results from 1990 to 2003 in 25 states and used the PRI to replicate previous research. Their major findings were that pressure created by high-stakes testing had almost no important influence on student academic performance, but there was greater test pressure in states with more minority students (Nichols, Glass, & Berliner, 2005).

### **Placement in Improvement Status**

Despite convoluted data reporting and their questionably positive effects, many schools across the country have felt the full weight of not meeting NLCB standards. The process by which schools are placed in "improvement status" –

essentially branded "failing" – is highly controversial, appearing largely arbitrary to critics. Individual states each set their own proficiency standards their students must meet, and also determine the percentage of its students it requires to meet these standards. Furthermore, under the law, all subgroups of students in every state must have the same minimum percentage of its members achieving at the minimum level required by the state. "Subgroups" are groups of students from different major racial and ethnic groups, economically disadvantaged students, students with disabilities, and students with limited English language proficiency.

There is intense variability among the effectiveness of each state's assessment system, with some raising achievement levels at much higher rates than others (Finn, Petrilli, & Vanourek, 2006). Seeing discrepancies in gains arising from NCLB assessment systems suggests to critics that the testing programs, as they are currently implemented, do not improve public schooling in as equitable a manner as was intended.

Adequate Yearly Progress (AYP). Under NCLB, states must develop a definition of Adequate Yearly Progress (AYP) that is based on mathematics and reading scores on state assessments and includes graduation rates for high schools (Owens & Sunderman, 2006). AYP is used to determine school, district, and state progress towards increasing academic achievement. To make AYP, all subgroups of students must meet the state's proficiency targets (No Child Left Behind Act, 2008). States determine the minimum percentage of students that are required to meet proficiency levels, and must test 95 percent of its students (and 95 percent of students within each subgroup). Schools that do not make AYP for two consecutive years are

designated under the law as "needing improvement," and are subject to restrictive sanctions. Once schools have been identified for improvement, they must meet proficiency targets for two consecutive years before they are removed from improvement status.

A study by the Education Policy Research Unit at Arizona State University (2006) closely examined how well AYP functions as the key element of the NCLB accountability system. Researchers analyzed evidence from a variety of studies about major aspects of AYP, and found that there is a lack of evidence proving that the AYP system is well-funded enough to adequately provide schools serving children in poverty with the facilities, learning resources, qualified staff, or community support services needed to improve achievement. They conclude that the 100 percent proficiency by 2014 standard is unrealistic, and that increases in test scores that may be attributable to the AYP process are modest and insufficient to achieve that goal. This finding is corroborated by other researchers. Whether conceived as implementation costs or remedial costs, NCLB has been significantly underfunded in a way that disproportionately penalizes schools attended by the neediest children (Mathis & Union, 2006).

Impact on schools with high low-income and minority enrollments. State proficiency targets are generally comprised of four-year graduation rate minimums for each subgroup. In many states today, in order to graduate, students must pass a standardized high school exit exam. These restrictions are such that they are not as harsh on suburban schools with generally homogeneously white populations as they are on highly diverse schools without a large, adequately-performing white

population to pull up test scores. This occurs because white students traditionally perform better than minority students on the standardized tests that states use as indicators of school performance (Vanneman, Hamilton, Anderson, & Rahman, 2009). As a consequence, schools in "improvement status" in this country disproportionately encompass schools with high low-income and minority enrollment.

A 2006 study by Owens & Sunderman found that in six observed states, improvement schools were seen to serve far fewer white students than adequate progress schools; they concluded that schools most likely to be identified as needing improvement are highly segregated and enroll a disproportionate share of a state's minority and low-income students. This is a difficult effect to capture, however, and the finding is not easily replicable. Other researchers have found that the percentages of schools identified for school improvement vary wildly between states and do not seem to follow any population pattern, which could be the result of individual state determinations of the achievement scores necessary to meet AYP (Bathon & Spradlin, 2007).

Impact on diverse schools. Desegregated, more diverse schools face a special set of challenges under NCLB, and in many cases do not better serve minority students. Mean proficiency, subgroup rules, and participation rate requirements are harder obstacles to overcome for diverse schools than they are for more homogeneous schools. Subgroup rules create multiple performance and participation rate targets that schools serving multiple subgroups must meet; since schools can be labeled as needing improvement if even one subgroup fails to meet performance or participation

targets, having multiple subgroups can put a school at higher risk for falling into improvement status. Mean proficiency is another provision of NCLB that poses a challenge to more diverse schools, which typically serve low-achieving students. The rule that all schools and students meet the same mean proficiency level does not take into account initial differences in student performance. Thus, students that are in schools identified for improvement often make similar gains in mean proficiency as their peers in schools that were making adequate progress, but their schools are still placed in improvement status (Owens & Sunderman, 2006).

## **Sanctioning on Title I Schools in Improvement Status**

The sanctions NCLB imposes on schools designated as needing improvement specifically pertain to schools receiving Title I funds. Title I funds are allocated to schools serving "at-risk" students – schools where upwards of 40 percent of the students served come from low-income families, as per the 1965 Elementary and Secondary Education Act (ESEA) (No Child Left Behind, 2008). Title I of the Elementary and Secondary Education Act is the single largest federal investment in K-12 education, supplying over \$12.7 billion annually in funding to the states (Bathon & Spradlin, 2007, citing No Child Left Behind Act of 2001, 20 U.S.C. § 6319 (2008)). NCLB is its latest iteration. Title I funds are intended to equalize access to opportunities among public school students nationwide, specifically between low-income students and those with social and economic advantages in other schools. The law requires that improvement-status schools receiving Title I funds set aside 10

percent of their Title I allocation for professional development, and introduce a twoyear improvement plan incorporating teacher mentoring and parental involvement.

Additionally, improvement schools must offer and pay for the option of intradistrict public school choice (the option to transfer to another public school in the
same district). Districts must use 20 percent of their Title I allocation to pay for
supplemental educational services by a state-approved provider and for transportation
for students opting into the school-choice program. In the third and fourth years of
improvement programs, schools are guided by their districts in taking corrective
action – adopting new curricula, replacing school staff, reducing the management
authority of the school, and appointing outside experts to advise the schools. If the
schools remain in improvement status by their fifth year of sanctioning, they must be
completely restructured. Some form of alternate governance must be introduced, or
they may be closed and re-opened as charter schools, or state or private providers
may take administrative control (Owens & Sunderman, 2006).

High prevalence of Title I schools in improvement status. The ease with which the label "failing" is applied has implications for Title I schools. The Center on Education Policy published descriptive results on AYP determinations as of 2006, reporting that about 16 percent of all schools and 24 percent of all school districts did not make AYP based on the 2004-05 testing. Many schools that are branded as failing – 14 percent, or 6,478 schools in the 2004-05 school year – also receive Title I funding (Rentner, 2006a). In 2006, 54 percent of Title I schools identified for improvement in the school year 2005-06 were located in urban districts, even though just 27 percent of Title I schools were located in urban districts. The major reason for

AYP for up to 10 racial-ethnic and demographic subgroups, while some rural districts have to show progress for just two subgroups (white and low-income students).

Additionally, urban districts, due to their size, must make AYP for dozens of schools, while a small district may have just one elementary, one middle, and one high school (Rentner, 2006a).

Intra-district school choice in Title I schools. If AYP is not reached in Title I schools for two consecutive years, each school must use 20 percent of its Title I allocation to offer school choice to its students (and pay receiving schools the cost of accommodating its students) and to provide supplemental services to low-income students. Title I schools that repeatedly fail to meet AYP are also subjected to a range of corrective actions mandated by federal law, which may include replacing teachers, implementing a new curriculum, increasing the length of the school year or school day, appointing outside experts, or decreasing or restructuring management authority over the school.

The purpose of student achievement improvement options is two-fold. First, the purpose is to provide educational options and improved opportunities for students. Secondly, school choice and supplemental educational services are also aimed at providing incentives for low-performing schools to improve by introducing an element of competition for state and federal dollars, and ultimately for the students themselves. Districts in which schools are identified as needing improvement must provide parents with notification of their school choice options, including information on at least two schools from which to choose. In the notice the schools provide to the

parents concerning their choice options, the district must include information on the academic achievement of the schools identified as the potential transfer options. The lowest-achieving, low-income students are given the highest priority in choice options (Bathon & Spradlin, 2007).

Underutilization of the intra-district choice program. By all accounts, the program is underutilized. In the 2003-04 school year, 3.9 million students were eligible for school choice. Despite this large number, only 38,000 students – one percent of the eligible participants – took part in the program. The number of students utilizing school choice options has increased from 18,000 in 2002-03 to 45,000 in 2004-05, but remains a tiny fraction of the number of children in Title I schools that do not make AYP (Bathon & Spradlin, 2007).

Because intra-district choice is the only type of school choice that is required by NCLB, the number of higher performing schools and the number of available seats at those schools can be a significant limitation on participation in choice programs. Often, districts will have only one school per level, or all schools in a district will be in improvement status, making them ineligible to receive students. A total of 39 percent of the 6,200 Title I schools that were in improvement status in the 2004-05 school year did not offer choice to their students. This strikingly low percentage of compliance with the NCLB choice provision may be partially accounted for by the fact that 20 percent of all schools required to offer school choice reported no intradistrict choice to which students could be transferred (Bathon & Spradlin, 2007), and the fact that mandatory intra-district choice cannot be implemented where state laws explicitly make it illegal (No Child Left Behind Act, 2008).

Some cite lack of creativity on the part of districts in their outreach efforts when attempting to explain low participation rates. Effective and prompt notification to parents about the school choice program and supplementary educational services offered is necessary for increased participation (Shaul, 2006). Outreach is difficult, however, especially in rural areas. Inadequate communication between interested parties is often blamed, as well. There is a frequent delay in providing state classification information to districts themselves. The state AYP determination for individual schools is critical for determining each district's action, affecting districts' abilities to provide the legally mandated notification to the parents in time for them to exercise their federally provided choices. Some districts reported that their AYP determination was not received from their state until after the school year began, making parental choices to send their children to a different school unlikely (Bathon & Spradlin, 2007). Additionally, Bathon & Spradlin (2007) found extreme differences between districts with respect to English Language Learner (ELL) participation in choice program. This suggests that perhaps translation effectiveness of materials explaining available improvement options varies across districts, hurting choice rates.

One 3-year study by the Center for the Study of Education Reform in San Antonio, Texas found that choosing families are better educated and have higher incomes, fewer children, and more female parents in the workforce. This indicates that choice options in some areas are not reaching the most severely disadvantaged children (1993). Another reason for low participation in school choice and SES is a lack of funding by NCLB, and thus uneven monitoring of choice programs and SES

by states. States call for additional evaluation support and technical assistance; in 2006, 85 percent of states reported that they desired more assistance from the U.S. Department of Education about evaluation methods, and no state provided a conclusive assessment of choice and SES' effects on student achievement (Shaul, 2006).

### **School Culture**

Public schools in this country vary greatly in terms of the quality of education they provide, as a school's quality is largely dependent on the context in which it is located (Teddlie & Reynolds, 2000; Turner & Berube, 2009). There are connections between where a family lives and the quality of education that that family receives, if those children enroll in public schooling. For many families, the composition and quality of local public schools is a primary factor in choosing a neighborhood in which to settle; families of greater socioeconomic means avoid communities where schools perform poorly, fueling higher rents and property values in communities with schools that perform well. Local property values, in many areas, also determine how much a district can spend on teachers and school facilities. Consequently, schools in communities with a lot of low-income housing suffer from insufficient funding, obsolete facilities, and overextended teachers (Turner & Berube, 2009). This creates a self-perpetuating cycle of poverty concentration, racial segregation, and neighborhood distress. The socioeconomic makeup of a student population thus largely determines how many resources are available to an individual school. The adeptness of school administrators at resource manipulation also becomes important.

Excellence in education has a close relationship with "school culture," which is similarly dependent on the demographic characteristics of the population it serves. Socioeconomic and racial factors play a large role in determining the beliefs, desires, and goals of the student body – its "cultural" components – as well as the intentions of its teachers.

Schools rich in the kind of "school culture" that nurtures students, preparing them mentally and emotionally to pursue knowledge and seek higher education, are regarded as providing better educations in terms of workforce preparedness.

Employers recognize that college graduates possess skills that those with only high school diplomas don't, particularly in the realms of non-routine problem-solving and effective communication (Levy & Murnane, 2004). Effective schools foster gentle competition amongst students. If students are expected by their friends and the community at large to seek higher education – the stepping stone to social mobility – they will be more likely to consider college as an option than students immersed in a school culture where this expectation is not present. This assertion has been affirmed by desegregation studies, which have demonstrated that students transferring into schools with cultures of achievement will experience less trouble with the law and be more likely to go to college (Angrist & Lang, 2002).

"Cultural" school choice program benefits. It has been demonstrated that in classrooms, "culture" – generally, students' perceptions of which goal stresses are present – greatly influences the average amount of motivation present in that classroom (Fyans & Maehr, 1990). This thesis hypothesizes that the same is true in schools at large. School choice has become an increasingly prominent strategy for

urban school districts seeking to enhance academic achievement for individual students, as immersion in a different "school culture" is thought to increase opportunity for individual students in a way that even a heavy investment of financial resources cannot. Evidence from long-standing desegregation programs has been presented that an urban student transferring into a suburban school with more resources has a higher chance of graduating, going to college, and getting a job than he would if he had remained (Wells, 1995). The benefits of school choice are thought to derive largely from less-tangible resources, such as active parents and high-achieving peers that are often found in high-achieving receiving schools (E. Dillon, 2008).

Evaluating the impact of choice programs is complicated by the fact that only a highly select sample of students takes advantage of them. To overcome this difficulty, Cullen, Jacob, & Levitt (2005) exploited randomized lotteries that determine high school admission in the Chicago Public Schools. Surprisingly, these particular researchers found little evidence that attending sought-after programs provides any benefit on a wide variety of traditional academic measures, including standardized test scores, attendance rates, course-taking, and credit accumulation – despite the fact that those students who win the lotteries attend better high schools along a number of dimensions, including higher peer achievement levels, higher peer graduation rates, and lower levels of poverty. They did, however, uncover evidence that attendance at such schools may improve a subset of non-traditional outcome measures, such as self-reported disciplinary incidences and arrest rates.

An urban student transferring into a suburban school tends to enjoy more resources. The benefits of an increase in available resources can sometimes be subtle. In Massachusetts, for example, as of 2008, students had to pass the 10<sup>th</sup> grade MCAS mathematics and ELA examinations in order to receive a high school diploma. Those who failed the tests the first time were allowed to take them repeatedly and without time constraints, yet only 50 percent of students who failed the exams the first time went on to graduate on time, as opposed to 98 percent of students who received a perfect score. If it may be assumed that testing standards are in line with academic performance and readiness to thrive in society, this is not an especially striking finding; it makes sense that those who perform better on the exam would be more likely to graduate on time. It is those students who are on the margin of passing for whom the "passing" and "failing" labels are significant. Dividing a continuous measure such as test score into dichotomous categories causes some students with essentially equal performance to be labeled differently. Although the majority of students who fail the first time are likely to re-take the exam, disadvantaged subgroups are much less likely to pass the test upon retaking it than are suburban students at wealthier schools, perhaps due to discrepancies in amount of available resources (Papay et al., 2008).

#### **Call for Inter-District Choice**

It has been noted that the preparedness of certain segments of the public school student population is lacking. Specifically, some subgroups of students often prove unmotivated to attend college and unable to obtain jobs with opportunities for

promotion or increasing pay scales over time. Such poor outcomes tend to be regarded by policymakers as a failure of the current legislation to make provisions to serve disadvantaged students. Broad policy reforms that reach the entire national public school enrollment are now called for to correct these inequities (Vaznis, 2010).

Specifically, research supporting public school choice and the positive effects of desegregation has led some to call for a change in the NCLB policy that only mandates intra-district choice. Currently, inter-district choice is not required by federal law. If all public schools served by a district are in school improvement, corrective action, or restructuring, the district must try to establish a cooperative agreement with other districts to provide students the option to transfer to another public school, but it is not required that such an agreement be established.

Several researchers argued that expanding choice programs to include an inter-district provision is a means to reducing economic and racial segregation in public education, giving students in failing schools a better chance to achieve. Many organizations, including the nonpartisan Century Foundation and the Citizens' Commission on Civil Rights, have endorsed the idea (E. Dillon, 2008). Theoretically, inter-district choice would allow students in low-performing schools – schools that often have high concentrations of low-income and minority students – to move to higher-performing schools with very different economic and racial profiles. Advocates insist that allowing students to move across district lines, further than the current iteration of NCLB mandates, would increase students' educational opportunities significantly.

Many states already have a voluntary open-enrollment or multidistrict choice program in place. As of 2008, 46 states had some type of "open-enrollment" option for students, and 42 of those had an inter-district provision (Bathon & Spradlin, 2007). These programs suffer from low participation rates. This may be due to the long distances in some states between low-achieving and high-achieving schools which, coupled with limited spatial capacity in many high-achieving schools, sharply limits the ability of students to take part in inter-district choice programs.

Participation is also diminished due to a lack of information for parents and inadequate transportation subsidies for disadvantaged families (E. Dillon, 2008).

Advocates insist that incorporating an inter-district choice provision into NCLB would force states to cope with pragmatic barriers to choice participation. Federal law would mandate that transportation costs be covered for disadvantaged families, whether by the sending district or by the state. Most advocates contend that states should pay the added costs incurred by receiving districts, and that struggling districts should not be required to reimburse receiving schools for sending students. Some proponents of inter-district choice argue that a successful inter-district school choice program would also require a federal fund to underwrite the costs of complying with the law, and that Congress should enact specific fiscal penalties for states that do not implement reforms within a prescribed timeframe (Kozol, 2007). The provision would also limit high-achieving schools' authority to reject students due to space restrictions.

**Potential "cultural" ramifications for "sending" districts.** This thesis argues that though school choice may be beneficial to those students who actively

partake, it can have a passively adverse effect on the peers that they leave behind. Those students that are left in "failing" school cultures, amidst improvement reforms of questionable effectiveness, suffer. Indeed, many schools in improvement status are unable to pull themselves out, due to the ineffectiveness of prevailing remediation tactics; these schools are eventually subjected to massive corrective action, which may include replacing staff, implementing new curricula, decreasing management authority, and reorganizing. Casserly (2007) examines data from 36 urban districts, finding that of the 7,446 schools within those districts, 5,894 (79.2 percent) are Title I schools subject to NCLB accountability provisions. In the 2005-06 school year, 2,203 (29.6 percent) of those schools were in improvement status. Of those schools in improvement status, 449 (20.3 percent) had failed to make AYP for five years, and were thus in the "restructuring" phase, required to make arrangements for alternate governance. The numbers of schools in earlier stages of improvement status had increased over time since the implementation of NCLB, suggesting that schools experience extreme difficulties in pulling themselves out of improvement status.

In schools currently required to partake of intra-district school choice, financial resources are depleted due to the use of Title I funding on the transportation of some students elsewhere, rather than on internal improvements (Owens & Sunderman, 2006). A less tangible but similarly depleted resource is motivation. Students opting for school choice tend to be the most academically driven, citing educational quality or learning as their reason for choosing (Martinez, 1994; Armor & Peiser, 1997), and it follows that losing their positive influence will adversely affect the motivation of those students that remain in struggling schools. If none of his peers

are college-minded, for example, it would be harder for a white, middle-class boy to plan to attend college than it would be for his identical counterpart – another white, middle-class boy – immersed in a school culture with a stronger tradition of sending students on to college.

Historically, many existing inter-district choice programs have failed to produce the increased socioeconomic integration that inter-district choice advocates envision. Some may have actually increased racial segregation (E. Dillon, 2008). Open-enrollment policies date to desegregation efforts in the 1960s, appearing as a means to integrate school districts following the Brown v. Board of Education decision outlawing de jure segregation. In practice, however, many of these plans were enacted by those seeking to preserve a segregated school system; inter-district choice allowed white students to choose to continue to attend their all-white schools, leaving black students to either face potentially hostile environments in all-white schools or remain in their segregated schools. It is not unconceivable that mandating inter-district choice in Title I schools in improvement status would deepen racial segregation, allowing white students in districts with high minority enrollments to transfer to whiter – more highly achieving – districts. This is an interesting thought in light of more recent rulings endeavoring to desegregate schools and increase equality in public education. On July 9, 1996, the Connecticut Supreme Court issued its Sheff v. O'Neill desegregation decision, in response to the complaints of eighteen young students and their families about unequal access to high-quality public education. The Court ruled that Connecticut has an obligation to provide public school students with substantially equal educational opportunities, and that racial and ethnic isolation

detracts from quality of education. Practically, this ruling made school districting based upon town and city boundary lines unconstitutional, due to intense racial segregation between Connecticut municipalities. Sekou (2009) notes that compliance with the *Sheff v. O'Neill* ruling has been strongly opposed by white parents, who have asserted negative racial attitudes and resisted desegregation. Compliance with the ruling has been slow in many areas because of their objections. If inter-district choice programs are expanded, white Connecticut parents would enjoy having a legal way of continuing to send their children to predominantly-white schools.

College aspiration as a measure of school culture. In today's workforce climate, it makes sense to measure student motivation in terms of college aspiration, rather than in rates of graduating from high school. In 1996, before his election to the Presidency, an idealistic Barack Obama wrote about an important shift in mentality regarding public education in this country that he wished to see over the course of his lifetime:

Our investment in education can't end with an improved elementary and secondary school system. In a knowledge-based economy where eight of the nine fastest-growing occupations this decade require scientific or technological skills, most workers are going to need some form of higher education to fill the jobs of the future. And just as our government instituted free and mandatory public high schools at the dawn of the twentieth century to provide workers the skills needed for the industrial age, our government has to help today's work-force adjust to twenty-first-century realities. (p. 194)

Consequently, as part of the American Recovery and Reinvestment Act, Congress has appropriated more than \$100 billion to public schools, with a new idea of what comprises "academic achievement." Success as an idea is less frequently concentrated in the high school diploma; degree of college-mindedness is the newest, most appropriate measure of achievement. The Recovery and Reinvestment Act includes a competitive "Race to the Top" fund that encourages innovation and strives to induce a few notable shifts in mentality with regard to public education (Schramm & Zalesne, 2009). As per the Race to the Top guidelines, published by the Department of Education, schools must strive to increase college enrollment and the number of students who complete at least a year of college.

"College aspiration" is thus a good measure of student motivation. Similarly, labeling schools and districts that send high rates of graduates on to college as being "highly effective," or as having a "richer" school culture, is valid.

# **Hypothesized Effect**

This thesis hypothesizes that making inter-district choice a mandatory option for students in failing schools, though benefitting those students who are able to actively partake, would have a disproportionately adverse effect on those students remaining in failing schools. This would be due to an alteration in school culture. The absence of intrinsically motivated, high-achieving peers would cause those who derive motivation from external sources, abandoned in cultures of "failure," to suffer. The present study explores the relationship between inter-district school choice and college aspirations – arguably the best proxy available for student motivation (and

therefore, for school culture) within the context of data gathered by the state of Massachusetts.

Massachusetts as a case study. Massachusetts implemented many reforms that have been regarded as successful in the early 1990s. Since the publication of the Massachusetts Education Reform Act in 1993, the state has invested more than one billion dollars per year in additional funding for K-12 public education. By many accounts, the increased funding has incited progress. The state has a history of performing highly on the NAEP (Chieppo & Gass, 2009) and a strong record of producing college-bound students (Papay et al., 2008). Massachusetts academic standards have been praised as being among the most rigorous in the country (Finn, Petrilli, & Vanourek, 2006). Papay, Murnane, & Willett (2008) chose Massachusetts for their examination of the consequences that struggling low-income urban students face as a result of failing the MCAS high school exit exam for this reason, and for the reason that the Massachusetts system is well-established. The 10<sup>th</sup> grade MCAS test has been a graduation requirement since 2003 (Finn, Petrilli, & Vanourek, 2006). Because Massachusetts systems are widely hailed as being successful, they may be used in the future as a model for other states. Before this occurs, it is crucial that the provisions currently in place be examined for subtle, undesirable effects.

High school students in this generation tend to be college-minded in a way that the majority of their parents and teachers historically have not been. For earlier generations of Americans, merely holding a high school diploma carried more extreme weight. Perhaps as an artifact of this emphasis on the high school diploma as a terminal degree, many states do not currently gather information on what becomes

of their graduates, but track them instead only through the receipt of their high school diplomas. If we are to subscribe to a new school of thought that holds that it is higher education that truly allows students to attain social mobility and increased labor force status, the collection of more information is instrumental to informing policy and bringing about helpful changes (Schramm & Zalesne, 2009). Massachusetts has at least begun to make progress in this direction; it has collected and made public data on the plans of its high school graduates since 1996.

A comprehensive inter-district school choice law has been in place in Massachusetts since 1991, allowing parents to send their children to schools in communities other than the city or town in which they reside. Tuition is paid by the sending district to the receiving district (Massachusetts Department of Elementary and Secondary Education, 2010). The Massachusetts program began small, with only about 1,000 students changing school districts during the 1991-92 school year, but grew steadily – in the 1995-96 school year, nearly 6,800 students opted to attend school in another districts. The Massachusetts Education Reform Act of 1993 expanded the choice provision, mandating that districts vote yearly on whether to accept choice students, and decreeing that districts cannot prevent transfers out. If a district chooses to receive out-of-district transfers, it cannot apply any selection criteria to individual students. Students interested in participating in choice programs enter lotteries. The number of transfers into a district is limited only by school capacity, as determined by that district. The total number of students who can participate is capped at 2 percent of the state's total public school enrollment, and there is a limit on the tuition paid to receiving districts for each transferring student of \$5000, or of 75 percent of per-pupil expenditure in the receiving district. The law also provides partial reimbursement of tuition payments made by sending districts. Rather than having state funds follow transferring students, sending districts have to pay full tuition costs – including those funded with local property taxes – out of their own state aid. This controversial policy makes Massachusetts a test case for the validity of applying the market competition thesis to public schools, as it is thought that this provides financial incentives for schools to work on restructuring and revitalization. Another controversial provision is the lack of restrictions in place regarding the maintenance of racial balance, which many skeptics in the mid-1990s thought would have a potentially adverse effect on desegregation (Armor & Peiser, 1997).

It has been said that an effective open-enrollment policy allows students to cross invisible lines – school attendance zones and district school boundaries – that often reinforce neighborhood segregation by race and income (E. Dillon, 2008). Advocates for inter-district choice argue that mixing minority with white students, high-income with low-income students, and low-achieving with high-achieving students will improve student achievement. Geography, school capacity, and the way district boundaries are drawn all have an impact on extent to which this "mixing" can occur; a large school district with a concentration of lower-performing schools in the center would have a hard time moving students long distances to higher-performing schools in other districts. On the other hand, a state with many smaller districts could offer multiple options close to students' home districts (E. Dillon, 2008).

Massachusetts is a small state with a dense population; consequently, it contains

many school districts. By Dillon's (2008) logic, if inter-district choice were to be successful anywhere, it would be in Massachusetts.

At first glance, the inter-district provision of the Massachusetts law appears to have been mutually beneficial for sending and receiving districts. Armor & Peiser (1997) investigated whether or not competition for students prompts net sending districts – districts that "send" more than they "receive" – to undertake program improvements to mitigate losses. They also looked at whether the absence of racial controls in Massachusetts has had adverse effects on racial balance, and whether the motivation of choice families is consistent with the competition hypothesis (i.e., they are seeking better schools) or with the elitism hypothesis (i.e., they are avoiding poor or minority students). They concluded that the market competition hypothesis is valid for most of the districts in case study. The sending districts most severely affected by student losses responded by improving their policies and programs in order to win back students and attract replacements from other districts. Another group of sending districts, experiencing no significant negative effects on programs, staffing, or resources, did not respond to choice losses. Importantly, those districts that made programmatic changes slowed or reversed their choice losses, while those that did not continued to lose students at the same rate. The researchers found no significant effects on racial balance, reason being that districts with the highest concentrations of minority and poor students – districts most likely to send students to other districts – also have large total enrollments.

In response to the motivation question, Armor & Peiser (1997) found that the vast majority of choice parents and students, and staff at some sending districts, cited

academic and programmatic features as the main reasons for choosing a particular school district. All survey and interview data reviewed in the study showed substantial support for expanded school choice in general and inter-district public school choice in particular. Even a majority of school administrators from net sending districts supported inter-district choice, albeit with some changes. The strongest support for the expansion of the program came from the most affected districts, which ended up revitalizing their academic programs due to pressure from choice.

Armor & Peiser's findings, however, are over ten years old at this point, and the effects of the inter-district choice program must be reexamined now to reflect changes in what is now perceived as important in public education and what the longterm effects of inter-district choice have been. To date, most research on school choice in Massachusetts has been concerned with the effects of desegregation on receiving suburban districts. A 2002 study by Angrist & Lang, for example, studied the impact of Massachusetts's Metropolitan Council for Educational Opportunity (METCO) program – a desegregation program that sends students out of the Boston public school district to more affluent suburban districts – in terms of the test scores of third, fifth, and seventh graders in a large METCO-receiving district. Data analysis revealed that because METCO students had substantially lower test scores than students residing in the receiving district, the influx of METCO students generated a significant decline in scores, with a marked impact on the lower quartile. Further analysis, however, revealed that the overall decline was due to composition effects, because no impact was found on average scores in a sample of all non-METCO

students. Desegregation effects have thus been demonstrated to have only modest and short-lived effects on METCO-receiving districts.

Shift in research focus. Public perceptions of what is important in public education have shifted, now incorporating "degree of college-mindedness" as an important measure of school effectiveness. Comprehensive exploration of the effects of inter-district choice must include an examination of concurrent trends in college aspirations. Before inter-district choice is integrated into by federal law, it must be soundly disproven that allowing motivated students to flee underperforming school districts in search of stronger communities will not negatively impact the large numbers of students they abandon in disadvantaged school systems. The present study instigates preliminary exploration of this effect.

## Methods

# Sample

The present study utilizes data collected from 247 districts by the Massachusetts Department of Elementary and Secondary Education between the years 1996 and 2009, which is available for public viewing on their website. The districts selected are all those for which complete data is available. Some districts currently existing in Massachusetts were created after 1996 due to re-zoning. Those districts were omitted from the current analysis. Charter school districts created after 1996 were also omitted, in the interest of observing consistent trends over the entire 14-year time span, and because school choice data is not available for charter school districts.

## **Design**

Several variables were created for use in correlational analyses from the Massachusetts data.

**Sending.** The "sending" variable is a calculation of the percentage of students who opted to attend school outside their home district. It was created by taking the raw data available on the number of full-time equivalent (FTE) pupils sent from each district and adding that number to the number of pupils enrolled in that district. The raw number of FTE pupils sent away was then divided by the total number of pupils that would be attending school in the home district (if those opting to leave had stayed) to find the percentage of students leaving.

**Receiving.** The "receiving" variable was found by dividing the number of FTE pupils each district accepted by the total enrollment of that district, to obtain the percentage of students in each district that had transferred in.

College Plans. Data on the plans of students in each district is collected by the state upon students' graduation from the 12<sup>th</sup> grade. The "college plans" variable in this study was created by combining the percentages of students in each district who reported that they were planning to attend either a four-year public college or a 4-year private college. Though data is available on students attending community college, as well, this study assumes that the caliber of education President Obama discusses as being necessary to obtaining gainful employment and achieving social mobility is the type that is provided at four-year institutions. The "college plan" variable here functions as the best measure of school effectiveness, or assessment of school culture,

that is currently available and contextually appropriate in the current economic climate.

Achievement. "Achievement" data was obtained from the state's reporting of the 10<sup>th</sup> grade Composite Performance Index (CPI) in English/Language Arts for each district. The CPI is an 100-point index that assigns 100, 75, 50, 25, or 0 points to each student participating in the MCAS testing each year. The total points assigned to each student are added together and the sum is divided by the total number of students assessed. The result is a number between 0 and 100, which constitutes a district CPI for that subject and student group. Since passage of the ELA section of the 10<sup>th</sup> grade MCAS is a requirement for graduation, this study and others examining student achievement assumes it is valid to equate 10<sup>th</sup> grade ELA CPI with achievement for any given district, presuming that teachers and students strive to improve ELA CPI when trying to improve achievement. Because MCAS testing was not implemented until 2003, achievement data is only available for the last five years examined.

**Low-Income.** Finally, the "low-income" percentage variable comes from Massachusetts-reported figures of the percentage of students in each district that come from low-income families in each year. This information is currently publicly available prior to and including 2008. This source of data was chosen in order to remain consistent with previous studies looking at NCLB's effect on impoverished students.

### **Procedure**

The present study endeavors to correlationally examine the effects of interdistrict school choice trends on the college aspirations of Massachusetts students. The
study hypothesizes that as academically-motivated students flee failing schools, the
aspirations of those students left behind will fall. The assertions that schools with
high proportions of low-income students and with falling levels of achievement
"send" more students is also tested. Spearman correlations are run for each year
among all of the aforementioned variables. Spearman correlations were selected as
the best method of capturing effects between the variables as the data does not have a
normal distribution, which would be required for a Pearson correlation.

#### Results

A total of 247 school districts were included in the analyses. As Table 1 illustrates, the CPIs of the districts ranged from 74.3% to 99.60% (M = 93.7%, SD = 4.57) in 2009, with gradually increasing means and gradually decreasing variances in the additional years reported. In 2009, the percentage of the student body being "sent" outside of the district ranged from 0% to 19.4% (M = 1.85%, SD = 3.32) and the percentage of students "received" ranged from 0% to 24.75% (M = 2.52%, SD = 4.72). It is worth noting that the general trend in percentage of students that districts "sent" over time increased with each new year, as did the percentage "received." Finally, in 2008, the percentage of low-income students ranged from 0.10% to 86.80% (M = 20.43%, SD = 18.39) across districts, with comparable means and variances in previous years.

Table 1

Descriptives of "sending," "receiving," "college plans,"" achievement," and "low-income" data for each year

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Sending														
Min	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Max	10.04	11.32	16.10	18.50	18.64	17.77	18.47	16.49	15.99	14.31	13.68	16.76	15.71	19.40
Mean	0.88	0.93	0.98	1.04	1.11	1.11	1.17	1.24	1.36	1.43	1.52	1.65	1.76	1.85
SD	1.67	1.72	1.87	2.00	2.00	1.98	2.09	2.14	2.35	2.46	2.61	2.91	3.07	3.32
Receiving														
Min	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Max	28.25	29.05	29.10	30.62	29.26	25.65	23.36	22.79	21.60	20.54	24.00	24.38	25.44	24.75
Mean	1.49	1.57	1.63	1.71	1.71	1.68	1.74	1.79	1.92	2.05	2.19	2.32	2.39	2.52
SD	3.69	3.78	3.87	4.11	3.86	3.70	3.62	3.61	3.79	3.94	4.16	4.35	4.44	4.72
College Pla	ns													
Min	1.40	0.00	2.00	0.00	1.10	1.90	0.00	0.00	0.00	4.90	5.10	0.00	4.40	3.70
Max	93.40	93.40	95.00	93.90	94.60	95.10	100	95.10	93.90	96.80	96.60	99.40	98.70	97.30
Mean	55.88	55.39	55.70	55.13	55.99	56.57	54.80	56.98	57.21	58.66	58.60	58.85	58.63	57.72
SD	20.90	21.50	21.16	21.20	21.28	20.97	23.72	21.73	21.89	21.33	20.80	21.39	21.94	21.06
Achieveme	nt (CP	(I)												
Min	_	_	-	_	_	_	_	55.40	58.30	61.80	61.40	61.90	69.20	74.30
Max	_	_	-	_	_	_	_	97.90	98.30	99.80	99.30	100	99.50	99.60
Mean	-	-	-	-	-	-	-	84.53	86.13	87.65	89.08	90.22	92.00	93.71
SD	-	-	-	-	-	_	-	9.24	8.51	7.52	7.09	6.33	5.22	4.57
Low-Incon	1e													
Min	0.00	1.10	0.00	0.00	0.30	0.00	0.00	0.00	0.00	0.60	0.20	0.10	0.10	-
Max	82.70	75.70	72.60	75.10	82.80	81.70	80.30	80.00	82.70	84.60	84.00	85.10	86.80	_
Mean	16.44	16.59	16.23	16.08	15.78	15.35	15.58	16.13	17.25	18.02	18.85	19.72	20.43	_
SD	14.68	14.59	14.46	15.25	15.26	15.22	16.17	16.25	16.68	17.33	17.50	18.05	18.39	-

Note. Dashes indicate those values for which data was not available.

Table 2 presents the results of correlational analyses run between Composite Performance Index (CPI) on the  $10^{th}$  grade English/Language Arts portion of the MCAS and aggregate percentages of high school seniors planning to attend college. Spearman correlations were run for each year for which "achievement" data is available, 2003-2009. As Table 2 demonstrates, there are strong, positive correlations between achievement and college plans, ranging from  $\rho(245) = -.76$ , p < .01 to  $\rho(245) = .85$ , p < .01. These results suggest that communities with high rates of academic success are more inclined to send high school seniors to four-year colleges, which was an underlying assumption of this study's main hypothesis.

Table 2
Spearman correlations between 10<sup>th</sup> grade ELA CPI and percentage of 4-year-college bound seniors

	ρ
2003	.79**
2004	.85**
2005	.80**
2006	.84**
2007	.80**
2008	.82**
2009	.76**
Notes:	* <i>p</i> < .05. ** <i>p</i> < .01.

As presented in Table 3, negative correlations were seen in every year between Composite Performance Index (CPI) on the  $10^{th}$  grade English/Language arts section of the MCAS and percent of students in each district leaving via the voluntary inter-district choice program. The strength of these negative correlations, ranging from  $\rho(245) = -0.13$ , p < .05 to  $\rho(245) = -0.20$ , p < .01, suggests that achievement of a district influences the rates of students leaving that district when inter-district choice is available. This was another underlying assumption of the present study.

Table 3

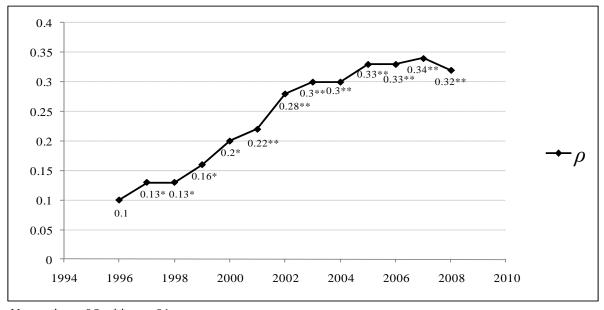
Spearman correlations between 10<sup>th</sup> grade ELA CPI and percentage of students "sent"

	ρ	
2003	-0.13*	
2004	-0.16*	
2005	-0.13*	
2006	-0.20**	
2007	-0.15*	
2008	-0.17**	
2009	-0.16*	
Notes:	* <i>p</i> < .05. ** <i>p</i> <	.01.

The interplay between percent of students leaving each district through the inter-district choice program and percent of low-income enrollment in each district was then examined, testing the assertion that schools with a higher percentage of low-income students do not have the resources – financial and cultural – to fulfill the needs of more academically motivated students. The resulting positive Spearman correlations, as seen in Figure 1, are strong and significant between 1997 and 2008. They increase over time, from  $\rho(245) = .13$ , p < .05 in 1997 to  $\rho(245) = .32$ , p < .01 in 2008. The correlation in 2007 was higher than in 2008,  $\rho(245) = .34$ , p < .01. It is worth noting that with the implementation of NCLB and its accompanying accountability measures in 2001, these correlations began to increase at a faster rate from one year to the next.

Figure 1

Spearman correlations between percentage of students "sent" and low-income enrollment

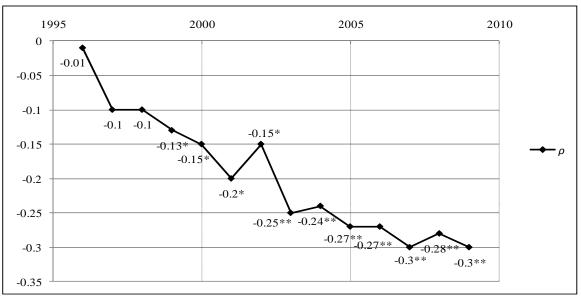


*Notes:* \*p < .05. \*\* p < .01.

Next, the correlation between percentages of students leaving districts via inter-district choice and districts' aggregate percentages of 4-year-college bound seniors was examined for each year. The resulting negative correlations are strong and significant between 1999 and 2009, as displayed in Figure 2. They increase from  $\rho(245) = -0.13$ , p < .05 in 1999 to  $\rho(245) = -0.30$ , p < .01 in 2009. This suggests that a districts' increased participation in a school choice program may indeed have an adverse effect on the college aspirations of those students that remain. These correlations also indicate that the threat of NCLB provisions and accompanying "failing" labels may have had an impact on this effect. The implementation of high-stakes testing as a graduation requirement occurred in 2003. There is a large increase in the negative direction in the correlations between students "sent" and the college plans of those students left behind in 2003, which then increased steadily until 2009.

Figure 2

Spearman correlations between percentage of students "sent" and college plans



*Notes:* \*p < .05. \*\* p < .01.

To determine whether inter-district choice has had any effect on the aspirations of "receiving" districts, the relationship between percentage of students received into each district and college plans was explored. The correlations between these two variables are small and insignificant for every year except 2009, when  $\rho(245) = -.13$ , p < .05, as seen in Table 4. This indicates that receiving students does not adversely affect the motivation of students already present.

Table 4

Spearman correlations between percentage of students "received" and college plans

	ρ
1996	0.02
1997	0.00
1998	-0.02
1999	-0.01
2000	-0.01
2001	-0.11
2002	-0.03
2003	-0.13
2004	-0.05
2005	-0.13
2006	-0.10
2007	-0.11
2008	-0.10
2009	-0.13*

*Note:* \**p* < .05.

Finally, it was observed that districts that participate in choice programs seem to "send" students as well as "receive" them. The Spearman correlations between rates of sending and rates of receiving are quite high, and increase over time, with  $\rho(245) = .56$ , p < .01 in 1996 increasing to  $\rho(245) = .73$ , p < .01 in 2009. This effect is displayed in Table 5.

Table 5

Spearman correlations between percentage of students "sent" and "received"

	p
1996	.56**
1997	.62**
1998	.61**
1999	.64**
2000	.61**
2001	.65**
2002	.66**
2003	.69**
2004	.70**
2005	.72**
2006	.70**
2007	.73**
2008	.72**
2009	.73**

*Notes:* \*p < .05. \*\* p < .01.

#### Discussion

The correlations between "achievement" data and "college plans" are strong and largely static. Because college plans are the most accurate tool available to measure school culture or effectiveness in the context of this study, these results indicate that the assumption that immersion in high-achieving school cultures prompts students to consider attending 4-year colleges is likely true.

Significant negative correlations were also seen between achievement and the percentage of students leaving school districts via inter-district choice, suggesting that students are more inclined to leave school districts that are not performing well. This could be because they find the academic climates in failing schools unfulfilling, or for the more tangible reason that low-performing schools tend to be located in poorer areas (Turner & Berube, 2009), and thus have fewer resources than schools with a lower percentage of "low-income" students. Indeed, the percentage of students leaving districts through inter-district choice and districts' percentage of low-income enrollment are negatively correlated and have become increasingly significant and strong over time. Pragmatically, this means that more and more students are leaving poorer schools over time, resulting in a cycle that leads those same schools to become increasingly impoverished over time.

Next, the results show that indeed, there is a negative correlation between percentages of students leaving failing districts and the college aspirations of those students who remain. These correlations are statistically significant each year between 1999 and 2009, becoming increasingly strong and significant over time. This finding suggests that the effect of motivated students leaving failing districts on

college aspirations in those home districts is getting stronger as time passes. It may be argued that this effect is seen as an aggregate result because it was those academically motivated students who were going to attend college, so as they transfer to other districts, it is obvious that the percentage of students with high college aspirations sending districts will decrease. This criticism may be countered with the observation that in most cases, the percentages of students leaving districts – though they increase over time and correlate with student achievement in those districts – are too small to pull up average college plans on their own. Therefore, perhaps a more plausible alternative interpretation is that the adverse effects of students leaving failing districts stem from the loss of their everyday positive influence in the classroom. Had they remained, they may have bolstered the motivation of their peers with less certain college aspirations. More driven individuals have the ability to foster collegemindedness in high school cultures; when their influence is removed, school culture and effectiveness are altered.

Conversely, districts that receive choice students do not appear to experience any significant alteration in school culture. The college aspirations of districts are not correlated with the percentage of their student bodies that come into the district via inter-district choice. This suggests either that students transfer to districts where college aspirations match their own, or that students transferring into a district are too insignificant in number to exact any real change in school culture in receiving districts. If the latter explanation is true, choice students may reap the benefits of suddenly being immersed in a school culture where college attendance is a norm; the motivation of these students, along with their self-perceptions of their potentials, is

increased. This is a similar effect as the one seen in many desegregation studies, which have found that accepting students does little harm to receiving districts, but has innumerable benefits for participating students from other communities (Angrist & Lang, 2002).

That the correlations between "sending" and "college plans" get stronger over time could be a simple result of increased general knowledge amongst parents about inter-district choice options, leading to increased rates of choice while college aspirations in each district remain static. The results of this correlational analysis, however, suggest that there could be a feedback loop present. That is, it is possible that college aspirations plummet when a floundering district loses academically motivated students. This alteration in culture could cause those students who become the most motivated in the failing schools to transfer out, as well. This sets struggling districts on a path toward potential closure. Without any additional available resources, a school that undergoes closing or massive restructuring faces bleak prospects.

#### Limitations

It is impossible to tease out a causal effect or draw any definitive conclusions using these data. In order to more fully examine the effects of districts' "sending" trends, individual-level data, rather than aggregate data, would need to be used. To fully view the interplay between NCLB regulations calling for increased accountability in high schools and rates of school choice participation, school choice data for high schools only within districts should be used. College plans of high

school students would need to be tracked from an earlier grade, in order to track changes in college aspiration upon immersing students in different school cultures. Individual survey data of choice students would be needed to determine their true motivation for transferring schools (i.e. academic reasons versus convenience), as well as their academic standing and social influence in their prior districts. With more complete, individual-level data on the aspirations of students before and after participating in an inter-district school choice program, as well as on the academic and social climates they are leaving (and receiving), the thought that seeing academically motivated students fleeing failing schools would have an adverse effect on those left behind might prove true.

Beyond higher-quality data reporting, a state without a voluntary inter-district school choice program with a comparable demographic makeup and academic baseline would need to be examined for the same time period, to control for nation-wide economic forces. It is possible in the present study that economic recession confounded "college plans" as a measure of "school culture"; it is certainly plausible that rates of going to college may have been more dependent on individuals' perception of what was economically feasible than on what the expectation in their community is.

With data collection not currently geared at examining the effects of school choice on the students left behind and the economy in recession, it is impossible to definitively tease out the effects of inter-district choice on college aspiration.

Unfortunately for those students stranded in failing schools, the current impossibility of drawing any causal links between certain influences on school culture and the

failing school cultures they are immersed in has disastrous implications for their futures.

### **Directions for Future Research**

An interesting and unexpected effect was seen when the "sending" and "receiving" variables were correlated. It seems that when districts participate in interdistrict choice, they tend to both send and receive students. A future direction for this work could be to examine whether the hypothesis of this thesis holds true in levels – that is, students may transfer out of failing schools to ones of higher achievement and effectiveness, at the same time that students are leaving those schools for ones with even higher levels of achievement and higher college expectations. The character of the basic, main effect found must be further explored.

More generally, these results suggest that there is a need for more research on the effects of inter-district school choice on "sending" districts. Currently, research is focused largely on "receiving" districts and on individual students who actively participate on choice programs. This study uncovers a potentially adverse effect on "sending" districts, which has previously gone unexamined and warrants further exploration.

#### Conclusion

Massachusetts has long been highly regarded for its adeptness at producing college-bound students (Papay et al., 2008), and for performing well on the NAEP. Indeed, in 2005, Massachusetts became the first state ever to finish first in four categories of the NAEP, cementing Massachusetts's position as a national leader in public education (Chieppo & Gass, 2009).

It is the tendency of the federally government to observe good, effective practices in education at the state level and mandate them for the whole nation. This occurred most strikingly in 2001, when Texas' model for high-stakes testing was incorporated into No Child Left Behind, drastically changing the way public education is conceptualized by teachers and transmitted to students (McNeil et al., 2008).

It would follow, then, that the nation at large may someday emulate those practices which may have contributed to Massachusetts's academic success. Some propose that the government borrow the Massachusetts model for inter-district choice and incorporate it into NCLB (Kozol, 2007). Alternately, it seems plausible in this educational climate that individual states might independently adopt inter-district choice, or bolster existing programs, in an attempt to mimic Massachusetts and achieve comparable academic success. Indeed, with new federal "Race to the Top" allocations being awarded to those states who implement the most pervasive reforms (Vaznis, 2010), it is now in states' best interest to review their education policies and implement what they have seen to work.

Implementing or reinforcing voluntary inter-district choice provisions would allow states to attract a large amount of federal governmental attention. The Obama administration appears to most highly reward reform plans that reach 100 percent of students, as seen in the first round of Race to the Top allocations. Delaware received \$100 million and Tennessee \$500 million for their wholly pervasive reforms (Vaznis, 2010). Because individual families volunteer for the program and because knowledge about the program may be easily transmitted to parents, inter-district choice could be a very easy reform to implement that would reach all students. It is also not a very taxing reform on the state educational budget, as tuition is paid primarily by "sending" districts. The second round of "Race to the Top" allocations is swiftly approaching, and states are scrambling to implement reforms that will earn them financial rewards (Vaznis, 2010).

The time has come, because of all these impetuses for change, to more closely explore how inter-district choice functions as a mechanism for academic improvement. This thesis presents correlational evidence that suggest that while being extremely beneficial to those students who actually participate, inter-district choice may have subtle detrimental effects on those students stranded in failing districts. In Massachusetts, the general trend for failing schools is that they remain in improvement status for long enough that they require complete overhaul. In a state with an academic baseline that is not as high as in Massachusetts, mandating that inter-district choice be available to students in failing schools may set those schools on an even slipperier slope towards restructuring. Though closing and restructuring failing schools may be a beneficial practice in the long run, in the current economy,

districts, states, and the nation as a whole do not have the resources to restructure schools in the most effective manner. Additionally, as the country is attempting to revive its economy, it seems imprudent to subject disadvantaged students to schools of poor effectiveness – even in the short term – without attempting to reverse failing trends. If anything, allowing students to flee failing schools at the expense of those left behind deepens discrepancies in available opportunities and in wealth between graduates of high performing districts and those of failing ones. These discrepancies go against the Obama administration's stated mission to equitably improve public education.

There are other means to reducing discrepancies in access to quality public schooling. A 2006 policy brief by Turner & Berube of the Urban Institute on Education prescribes expanding affordable housing options in non-poor neighborhoods, making schools with higher resources more accessible to families of limited means. A proposal such as this one would be much harder to enact; it has tangible financial repercussions and affects higher socioeconomic classes, which already have a louder voice in politics. The enactment of the policy would require a large amount of financial support from the government, and the rich would resist the pollution of their mansion-filled neighborhoods with affordable housing. Inter-district choice would be an easier reform to implement, and would perhaps be welcomed with open arms, as motivated students would jump at the chance to escape struggling districts. This thesis endeavors to advocate for more externally motivated students, damagingly immersed in school cultures of "failure," who would apply to college if only it were a cultural expectation. In it, I have attempted to uncover a subtle,

potentially detrimental effect on an already disadvantaged student population. I urge caution and call for further exploration of this issue. Above all, I implore that policymakers be mindful of the stated intention of NCLB – the equitable improvement of public schooling – and not hastily implement an easy reform just for the sake of showing the American populace that the "changes" they were promised are indeed occurring.

### References

- A Nation Accountable: Twenty-five years after "A Nation at Risk". (2008). *US Department of Education*, 25.
- American Federation of Teachers. (2008). Sizing up state standards, a standards-based reform report. http://www.aft.org/pubs-reports/downloads/teachers/standards2008.pdf.
- Angrist, J., & Lang, K. (2002). How important are classroom peer effects? Evidence from Boston's METCO program. Working Paper Series. *Report: NBER-WP-9263. 51pp. Oct 2002*.
- Armor, D. J., & Peiser, B. M. (1997). Competition in education: A case study of interdistrict choice. *Pioneer Institute for Public Policy Research*.
- Au, W. (2007). High-stakes testing and curricular control: A qualitative metasynthesis. *Educational Researcher*, *36*(5), 258.
- Bathon, J. M., & Spradlin, T. E. (2007). Outcomes of the school choice and supplemental educational services [rovisions of NCLB. Education Policy
  Brief. Volume 5, Number 4, Fall 2007. Center for Evaluation and Education Policy, 16.
- Bracey, G. W. (2009). Time to say goodbye to high school exit exams. *Principal Leadership*, 10.
- Casserly, M. (2007). No Child Left Behind in America's Great City schools: Five years and counting. *Council of the Great City Schools*, 22.
- Chieppo, C. D., & Gass, J. T. (2009). Accountability overboard. *Education Next*, 9.

- Connecting inner-City youth to the world of work. A program statement by the Committee for Economic Development. (1997). Report: ED407536. 51.
- Cullen, J. B., Jacob, B. A., & Levitt, S. (2005). The effect of school choice on student outcomes: Evidence from randomized lotteries. *Ann Arbor*, *1001*, 48109–1220.
- Dee, T. S., & Jacob, B. (2006). Do high school exit exams influence educational attainment or labor market performance? *NBER Working Paper*.
- Dillon, E. (2008). Plotting school choice: The challenges of crossing district lines. *Education Sector*, 32.
- Dillon, S. (2010, January 31). Administration Proposals Seek Broad Changes to 'No Child Left Behind'. *New York Times*. Retrieved from http://www.nytimes.com/2010/02/01/education/01child.html?th&emc=th.
- Evers, W. M., & Walberg, H. J. (2002). School accountability. *Hoover Institution Press, Stanford University, Stanford, CA*. Retrieved from http://www.hoover.stanford.edu/publications/books/accountability.html.
- Finn, C. E., Petrilli, M. J., & Vanourek, G. (2006). The state of state standards. Fordham Report, 2(5), 1–39.
- Fyans, L. J., & Maehr, M. L. (1990). School "culture," motivation, and achievement. *Project Report. Report: ED327949*. 51.

- Gardner, D. P., Larsen, Y. W., Baker, W. O., Campbell, A., Crosby, E. A., Foster, C.
  A., Francis, N.C., Giamatti, A. B., Gordon, S., Haderlein, R., Holton, G., Kirk,
  A. Y., Marston, M., Quie, A. H., Sanchez, F., Seaborg, G. T., Sommer, J.,
  Wallace, R. (1983). A Nation At Risk: The imperative for educational reform.
  An open letter to the American people. A report to the nation and the
  Secretary of Education. Superintendent of Documents, Government Printing
  Office, Washington, DC 20402 (Stock No. 065-000-00177-2, \$4.50). Retrieved from
  - http://www.eric.ed.gov/ERICWebPortal/contentdelivery/servlet/ERICServlet? accno=ED226006.
- Goals 2000: Educate America Act of 1994, 20 U.S.C. 5801 et seq. (1994).
- Great expectations: Holding ourselves and our schools accountable for results.

  (2009). US Department of Education, 41.
- Kozol, J. (2007, July 11). Transferring Up. *The New York Times*. Retrieved from http://www.nytimes.com/2007/07/11/opinion/11kozol.html.
- Levy, F. & Murnane, R. (2004). The new division of labor: How computers are creating the next job market. *Princeton, N.J.: Princeton University Press;*New York: Russell Sage Foundation.
- Martinez, V. (1994). Who chooses and why: A look at five school choice plans. *Phi*Delta Kappan, 75.
- Massachusetts Department of Elementary and Secondary Education. (1993).

  Massachusetts Education Reform Act of 1993. Retrieved March 3, 2010, from http://www.mass.gov/legis/laws/mgl/gl-71-toc.htm.

- Massachusetts Department of Elementary and Secondary Education. (2010). School and District Profiles. Retrieved February 2, 2010, from http://profiles.doe.mass.edu/.
- Massachusetts Department of Elementary and Secondary Education. (2010). School Finance: School Choice. Retrieved April 2, 2010, from http://finance1.doe.mass.edu/schoice/.
- Mathis, W. J., & Union, R. N. (2006). The accuracy and effectiveness of Adequate Yearly Progress, NCLB's school evaluation system. *Tempe, AZ: Arizona State University Education Policy Research Unit*. Retrieved online September, 25, 0609–212.
- McNeil, L. M., Coppola, E. M., Radigan, J., & Vasquez-Heilig, J. (2008). Avoidable Losses: High-stakes accountability and the dropout crisis. *Education Policy Analysis Archives*, 16(3).
- Nichols, S. L., Glass, G. V., & Berliner, D. C. (2005). High-stakes testing and student achievement: Problems for the No Child Left Behind Act. *Under review*.
- No Child Left Behind Act of 2001, 20 U.S.C. § 6319 (2008).
- Obama, B. (2006). The Audacity of Hope: Thoughts on Reclaiming the American

  Dream (1st ed.). New York: Crown Publishers.
- Owens, A., & Sunderman, G. L. (2006). School accountability under NCLB: Aid or obstacle for measuring racial equity? *Cambridge, MA: The Civil Rights*Project at Harvard University.

- Papay, J., Murnane, R. J., & Willett, J. B. (2008). The consequences of high school exit examinations for struggling low-income urban students: Evidence from Massachusetts. *NBER Working Paper*.
- Rentner, D. (2006a). From the capital to the classroom: Year 3 of the No Child Left Behind Act. Washington, DC: *Center on Education Policy*.
- Rentner, D. (2006b). From the Capital to the Classroom: Year 4 of the No Child Left Behind Act. Washington, DC: *Center on Educational Policy*.
- Schramm, J., & Zalesne, E. K. (2009, December 22). High School's Last Test. *New York Times*. Retrieved from http://www.nytimes.com/2009/12/22/opinion/22schramm.html.
- Sekou, B (2009). I Support School Integration, But...: "Sheff V. O'Neill" More than Ten Years Later and No End in Sight. *Equity & Excellence in Education* 42(2), 97-113.
- Shaul, M. S. (2006). No Child Left Behind Act: Education Actions Needed to
   Improve Local Implementation and State Evaluation of Supplemental
   Educational Services. Report to Congressional Requesters. GAO-06-758.
   Government Accountability Office, 71.
- Taylor, C. (1994). Assessment for measurement or standards: The peril and promise of large-scale assessment reform. *American Educational Research Journal*, 31(2), 231.
- Teddlie, C., & Reynolds, D. (2000). *The international handbook of school effectiveness research*. London and New York: Routledge.

- Turner, M. A., & Berube, A. (2009). Vibrant neighborhoods, successful schools: What the federal government can do to foster both. *Urban Institute*, 28.
- Vanneman, A., Hamilton, L., Anderson, J. B., & Rahman, T. (2009). Achievement gaps: How black and white students in public schools perform in mathematics and reading on the National Assessment of Educational Progress. Statistical Analysis Report. NCES 2009-455. *National Center for Education Statistics*, 80.
- Vaznis, J. (2010, March 30). Bay State loses in first round of US grants for education.

  \*The Boston Globe\*. Retrieved from http://www.boston.com/news/education/k\_12/articles/2010/03/30/bay\_state\_l oses\_in\_first\_round\_of\_us\_grants\_for\_education/
- Wells, A. S. (1995). Reexamining social science research on school desegregation:

  Long- versus short-term effects. *Teachers College Record*, 96.
- Who chooses and why? Baseline demographic data report. San Antonio School Choice Research Project. (1993). *Report: ED359610. 59pp. Jun 1993*.
- Wilkins, C. (2008). A review of "Avoidable losses: High stakes accountability and the dropout crisis." REL Technical Brief. REL 2008-No. 001. *Regional Educational Laboratory Southwest*, 9.
- Zabala, D., Minnici, A., & Kober, N. (2007). "It's different now:" How exit exams are affecting teaching and learning in Jackson and Austin. Washington, D.C.: *Center on Education Policy*, 48.
- Zhang, Y. (2009). State high school exit exams: Trends in test programs, alternate pathways, and pass rates. Washington, D.C.: *Center on Education Policy*.