BOSTON UNIVERSITY

UNIVERSITY PROFESSORS PROGRAM

Senior Thesis

CAN THEATRE CLOSE THE ACHIEVEMENT GAP?

THE CODMAN ACADEMY/HUNTINGTON THEATRE PARTNERSHIP

by

JACQUELINE ANNE BENNETT

Submitted in partial fulfillment of the Requirements for the degree of Bachelor of Arts

MAY 2006

Approved by

First Reader: _____ Charles Glenn Fellow of The University Professors; Professor and Chairman of Administration, Training, and Policy, School of Education

Second Reader:

Christine Rossell Professor of Political Science Acknowledgements

Thank you to Professor Charles Glenn and Professor Christine Rossell.

Without your help this paper would never have been written.

For Johanna, who showed me what theatre can do.

Table of Contents

List of Tables	6
List of Illustrations	7
I. Introduction	8
II. The Achievement Gap	9
Evidence on the Achievement Gap	9
Explanations for the Achievement Gap	10
Effects of the Achievement Gap	17
Long Term Effects	17
Knowledge Deficit	19
III. Theatre and Literacy	21
Research on Theatre and Literacy	21
Correlational Evidence	22
Experimental Evidence	24
Theatre and Literacy – The Process	27
IV. The Partnership	31
The Partners	31
Codman Academy Charter School	31
The Huntington Theatre Company	33
Overview of the Partnership	34
Intro to Theatre	35
Intro to Literacy	40
The Texts	41
Approaching the Dramatic Works	43
Reading as Rehearsal	45
The 'Threat' of Performance	48
Learning at Codman	50
V. Measures of Success	55
The DRP	56
The MCAS	61
Collection of Data	63
Hypothesis	63
Independent Variables	65
Student Population Indicators	65
School Organizational Characteristics	68
Results	70
Prediction	74

VI. Implications Theatre in America's Schools What it Takes	77 77 80
VII. Conclusion	84
• References	85
• Appendix A	90
• Bibliography	96

List of Tables

Table 1: Average DRP Scores by Class	59
Table 2: Change in Average DRP Score from Previous Testing	60
Table 3: Regression of the Percent of Students Scoring Advanced or Proficient on the 10 th Grade ELA MCAS Exam on Student Population Indicators and School Organizational Characteristics for the 2003-2004 and 2004-2005 School Years	71

List of Illustrations

Figure 1: Average DRP Scores by Class	59
Figure 2: The Percent of Codman 10 th Graders Scoring Advanced or	
Proficient on the ELA MCAS Exam – Predicted v. Actual	75

I. Introduction

Despite desegregation, myriad education and social reforms, and countless theories, racial disparities in achievement persist to this day. Perhaps, then, it is time to seek out more creative solutions to the problem of the achievement gap. My creative solution is theatre.

Acting is something I have always loved, and as a high school student I constantly used drama to help remember and conceptualize things for school (e.g. putting on a Congress of Vienna puppet show for my AP European study group). Through acting I have gained a deep appreciation for words and have learned how to express myself. Since theatre did so much for me in school (it even helped my friends learn history!), as I became aware of the achievement gap I naturally began to consider the role that theatre could play in closing it. My desire to answer the question "Can theatre close the achievement gap?" led to this paper.

In this paper I will first look at evidence on, explanations for, and effects of the black-white achievement gap, with a particular focus on verbal ability. Following this, I will review research on theatre and literacy, and outline the processes through which theatre can improve literacy skills. Next, I will describe a theatre-based-literacy Partnership between the Codman Academy Charter School and the Huntington Theatre Company and evaluate its success in boosting the achievement of minority students by analyzing test scores. Finally, I will examine the current status of theatre in schools and then assess the inputs needed to create a partnership similar to the Codman/Huntington model to see if widespread replication is possible.

II. The Achievement Gap

In every measure—in every grade—in every state in America, white students outperform black students on measures of academic achievement.¹ Although this phenomenon—the black-white achievement gap—has been the subject of countless studies, it remains one of the most perplexing issues in American education. There is a great need for educators to determine effective methods that insure all students are able to reach their academic potential. Once found, initiative must be taken to implement these methods.

Evidence on the Achievement Gap

The National Association of Educational Progress (NAEP) has, since the early 1970's, administered long-term trend assessments in reading and math to students ages 9, 13, and 17 in both public and private American schools.² The tests have remained virtually identical to their original formats and the differences found in test scores over time are significant at the .05 level. Thus, the NAEP's long-term trend assessments offer a reliable and accurate documentation of the achievement gap over time.

Overall, the assessments offer both good and bad news about the achievement gap in America. Both in reading and in math the gaps between white and black students in all age groups narrowed significantly from the late 1970's through the late 1980's.

¹ While gaps in academic achievement exist between other student subgroups, these lie beyond the scope of this paper.

² National Association of Educational Progress, "Trends in Average Reading and Math Scale Scores by Race/Ethnicity: White-Black Gap," 2004 Long-Term Trends http://nces.ed.gov/nationsreportcard /ltt/results2004/sub-race.asp.

Moreover, the gap narrowed as a result of improvement in black students' scores; white student achievement was not negatively affected. Throughout the 1990's, however, black students' scores fell and the gap between the two groups widened slightly. Although the results of the 2004 NAEP assessment indicate that the gap is again narrowing, differences in scores between the two groups are still great. Our work is far from done.

Explanations for the Achievement Gap

In 1954 the Supreme Court ruled in *Brown v. Board of Education* that "separate but equal (education)" was unconstitutional.³ In the 1960's the long and intricate process of school integration began. Integration helped but did not eliminate the gap.⁴ Explanations for the post-desegregation era continuation of the achievement gap are numerous and varied. It is clear, however, that the gap is not simply the result of differences in innate ability. While behavioral geneticists link genes to about one-half of the variance in a child's IQ, "genes can affect variation within groups without having any effect on variation between groups."⁵ Indeed, while genes likely play a role in individual achievement, there is no evidence that between-race genetic differences cause the gap. Among the findings that have discredited the role of genes in the black-white achievement gap: black children raised in white households achieve initially at levels comparable to those of white children, even so-called innate IQ scores are subject to

³ Brown v. Board of Education, 347 U.S. 483 (1954).

⁴ Charles Glenn, *The Social and Civic Context of Education*, revised ed. Boston: Boston University, 2004, 16.

⁵ Meredith Phillips et al., "Family Background, Parenting Practices, and Black-White Test Score Gap," in *The Black-White Achievement Gap*, ed. Christopher Jencks and Meredith Phillips (Washington DC: Brookings Institute Press, 1998), 109.

environmental change, and over the past half-century black-white differences have already narrowed substantially.⁶ Alternate theories for the gap's existence include socioeconomic status and family background, parenting strategies, teachers' expectations and students' self-esteem, ability grouping and tracking, and unequal school quality.

One of the most often heard explanations for the black-white achievement gap is that differences in socio-economic status (SES) between the two races lead to differences in student performance. This makes sense: in America disparities in wealth persist along racial lines. While 23% of all white 4th graders in American schools were eligible for free or reduced lunch in 2003, 70% of all black 4th graders were.⁷ Moreover, "black families with low income in a particular year are more likely to have been poor for longer than white families with similar income."⁸ Yet, when Meredith Phillips and her colleagues analyzed the link between a child's family's income over his or her lifetime and achievement, controlling for factors that affect income, they found that white and black differences in parental income account for only about one point of the fifteen point test score gap in verbal ability (Peabody Picture Vocabulary Test – Revised).⁹ As Phillips et al. suggests, this may indicate that the *economic* component of socio-economic status accounts for little of the difference in test scores.¹⁰

⁶ Christopher Jencks and Meredith Phillips, "The Black-White Test Score Gap: An Introduction," in *The Black-White Test Score Gap*, ed. Christopher Jencks and Meredith Phillips (Washington DC: Brookings Institute Press, 1998), 3.

⁷ National Center for Education Statistics, *The Condition of Education 2004*, NCES 2004-07, (Washington DC: US Government Printing Office), 2004.

⁸ Richard Rothstein, "Wising Up On the Black-White Achievement Gap," *Education Digest* 70, no. 4 (December 2004): 29.

⁹ Phillips et al., "Family Background, Parenting Practices, and Black-White Test Score Gap," 118. ¹⁰ Ibid., 119.

Indeed, the socio component of socio-economic status appears to be a predictor of academic success. Carl Bankston and Stephen Caldas analyzed the impact that singleparent homes, race, parental education level, family poverty status, and parental characteristics of schoolmates have on student achievement.¹¹ They found that singleparent homes and low levels of parental education have a strong negative effect on test scores. These family background measures, however, cannot alone explain the blackwhite gap: even when parental characteristics are identical, the average black student still scores below the average white student on academic measures.¹² This may mean that past inequities continue to play a role in the achievement gap. When Phillips and her team analyzed the effects of grandparents' education and quality of life, in addition to traditional measures of family background (which focus on parents) on test scores, they found that racial differences on these measures accounted for more than half of the variation in scores.¹³ This could explain why blacks continue to score below whites with equal *parental* income and *parental* education levels. It may take more than one generation to alter parenting practices.¹⁴

Parenting practices, in addition to other measures of family background, play a large role in determining how prepared children are when they enter school. This is particularly true for reading: when reading and math scores are standardized, family characteristics are more strongly linked to reading scores while school characteristics are

¹¹Carl L. Bankston and Stephen J. Caldas, "Family Structure, Schoolmates, and Racial Inequalities in School Achievement," *Journal of Marriage and the Family* 60, no. 3 (August 1998): 719-720. ¹² Glenn, *The Social and Civic Context of Education*, 17.

¹³ Phillips et al., "Family Background, Parenting Practices, and Black-White Test Score Gap," 104. ¹⁴ Ibid., 126.

more strongly linked to math scores.¹⁵ The average black child starts school with lower oral language, pre-reading, and pre-mathematics skills than does the average white child.¹⁶ Some studies have found that up to 75% of this difference in skills seen in kindergarten is the result of social class differences.¹⁷ Racial divergence on this measure, then, is not surprising: black children are more likely to live in single-parent homes and are more likely to have parents with low education levels than are white children. Black children are more often from poor families that lack the time or resources necessary to prepare fully their children for school. Moreover, the social aspects of low paying, menial jobs may influence the vocabulary that parents use when speaking with their children.¹⁸ Together, these factors probably explain why black children arrive in Kindergarten with fewer of the skills needed to be successful readers than do white children.¹⁹

"Different child-rearing patterns are one way class differences affect children's academic performance"²⁰ but not the only way. Poorer children simply have less access to resources at home. Kindergartners in the highest SES quintile own an average of 108

¹⁶ George Farkas, "Racial Disparities and Discrimination in Education: What Do We Know, How Do We Know It, and What Do We Need to Know?" *Teachers College Record* 105, no. 6 (August 2003): 1120.
 ¹⁷ Ibid. Farkas refers the reader to the research of Valerie Lee and David Burkam, *Inequality at the Starting Gate* (Washington DC: Economic Policy Institute, 2002), among others.

¹⁵ David Grissmer, Ann Flanagan, and Stephanie Williamson, "Why Did the Black-White Score Gap Narrow in the 1970s and 1980s?" In *The Black-White Achievement Gap*, ed. Christopher Jencks and Meredith Phillips (Washington DC: Brookings Institute Press, 1998), 198.

¹⁸ Rothstein, "Wising Up On the Black-White Achievement Gap," 28.

¹⁹ Meredith Phillips, James Crouse, and John Ralph, "Does the Black-White Test Score Gap Widen after Children Enter School?" In *The Black-White Achievement Gap*, ed. Christopher Jencks and Meredith Phillips (Washington DC: Brookings Institute Press, 1998), 230.

²⁰ Rothstein, "Wising Up On the Black-White Achievement Gap," 28.

books while kindergartners in the lowest quintile own an average of 38.²¹ According to the US Census Bureau, in 1999 79% of white children pre-kindergarten ages 3-5 read or pretended to read story books while only 66% of blacks at this age did so.²² Is it any wonder then, that black vocabulary scores at age six are equal to the vocabulary scores of whites at age five?²³

While these early deficits obviously play a large role in early differences in achievement, even when black and white children enter school with the same test scores blacks fall behind whites throughout the remaining school years.²⁴ The causes of this widening continue to be debated. Although differential parenting practices, the influence of the media, and a lack of summer learning probably contribute to this, many insist that schools also play a role.²⁵

Indeed, there are a variety of ways in which schools may contribute to the achievement gap, including through the influence of teachers' expectations on performance. Ronald Ferguson found that when past performance and observed predictors are taken into account, teachers generally don't show racial bias in perceptions of students' current ability; however, he maintains that teachers underestimate the

²¹ Gerald W. Bracey, "Inequality from the Get Go," Phi Delta Kappan 84, no.8 (April 2003): 636. Bracey's data is taken from Valerie Lee and David Burkam, Inequality at the Starting Gate (Washington DC: Economic Policy Institute, 2002), 40.

²² United States Bureau of the Census, *Home Literacy Activities and Signs of Children's Emerging* Literacy: 1993 and 1999, Statistical Abstract of the United States, 2000, NCES 2000-026, 1999 www.census.ov/prod/2001pubs/statab/sec04.pdf

²³ Phillips, Crouse, Ralph, "Does the Black-White Test Score Gap Widen after Children Enter School?" 230.²⁴ Ibid., 232.

²⁵ Ibid.

potential of a disproportionably high number of blacks.²⁶ It may also be, as other contend, that teachers are very accurate in their perceptions of students' potential ability. Yet, Ferguson's suggestion makes sense: rather than recognize that early knowledge deficits do not reflect intelligence, and instead reflect early life experiences, teachers may incorrectly assume that such students are less capable and, as a result, expect less of these students. In what David Armor calls the "harm and benefit thesis," it is hypothesized that teachers expect less from black students and this causes low black achievement by lowering motivation and self-esteem.²⁷ Unfortunately, lowered expectations may be particularly harmful for black students. Ferguson found that the impact of teachers' expectations is three times as great for blacks as for whites.²⁸ If teachers do hold inaccurate perceptions of black students' abilities, then, this may explain the continuation of the disparity between white and black achievement in the later years of school.

Similarly, others argue that tracking and ability grouping perpetuate racial differences in achievement. Ferguson found no direct evidence to support the notion of racial bias in placement of ability groups and tracking, when past performance was

²⁷ David J. Armor, "Black Achievement 50 Years After *Brown*," Prepublication Draft, Revised August 2004, Paper delivered at "50 Years After *Brown*, What Has Been Accomplished and What Remains to be Done," J.F. Kennedy School of Government: Harvard University, April 23-34, 2004, 23-34.

²⁶ Ronald Ferguson, "Teachers' Perceptions and Expectations and the Black-White Test Score Gap," in *The Black-White Test Score Gap*, ed. Christopher Jencks and Meredith Phillips (Washington, DC: Brookings Institute Press, 1998), 281.

²⁸ Ferguson, "Teachers' Perceptions and Expectations and the Black-White Test Score Gap," 286-7. Ferguson describes a 1996 study in which the researchers looked at the effects of teachers expectations in May on student performance on the Michigan Educational Assessment Program in the following October. See Lee Jussim, Jacquelynne Eccles, and Stephanie Madon, "Social Perception, Social Stereotypes, and Teacher Expectations: Accuracy and the Quest for the Powerful Self-Fulfilling Prophecy." *Advances in Experimental Social Psychology* 28 (1996):281-387.

controlled.²⁹ Ferguson did, however, find a tendency for children of high socioeconomic status to he placed in higher ability groups and tracks than past performance would predict; he notes that this may account for a small percentage of the observed racial differences in placements.³⁰ In addition, since some ability grouping begins as early as kindergarten and the average black child enters school with fewer skills than the average white child, this seems to insure lower placements for blacks regardless of potential to succeed.

Another possible role that schools may play in sustaining the gap's existence is through resource allocation. Despite the *Brown v. Board of Education* ruling, courts are reluctant to continue forced integration. As a result, while schools today are no longer segregated by law, they are often reflections of racially segregated neighborhoods. Thus, blacks are more likely to attend schools with high minority enrollment than are whites.³¹ Likewise, black students are much more likely to be concentrated in high-poverty schools (where more than 75% of students qualify for free or reduced lunch) than are whites.³² Despite this de-facto segregation, Christopher Jencks and Meredith Phillips maintain that per pupil expenditure is largely equalized today.³³ It does not necessarily follow, however, that all students have a level playing field. Poor and minority students need more—not equal—resources if they are to achieve at the same level as their more affluent

 ²⁹ Ronald Ferguson, "Can Schools Narrow he Test Score Gap?" In The *Black-White Test Score Gap*, ed.
 Christopher Jencks and Meredith Phillips (Washington DC: Brookings Institution Press, 1998), 326-342.
 ³⁰ Ibid.

³¹ National Center for Education Statistics, *The Condition of Education 2004*, NCES 2004-07, (Washington DC: US Government Printing Office, 2004).

³² Ibid.

³³ Christopher Jencks and Meredith Phillips, The Black-White Test Score Gap: An Introduction," 9.

peers. Yet, high-poverty areas often lack community services and the extra revenue needed to enhance schools beyond the base amount provided.

There is likely some truth as well as some inaccuracy in each explanation of the achievement gap. That no single definitive cause of the disparity in black-white achievement has been found is indicative of the complex and deep nature of the issue.

Effects of the Achievement Gap

Long Term Effects

The negative effects of the black-white achievement gap on blacks probably extend far beyond their lower scores on standardized tests: lower achievement on academic measures correlates with lower achievement later in life. Although whites and blacks graduate from high school at similar rates, there is a considerable difference in the rates at which they graduate from college. As of the year 2004, 28.2 % of whites age 25 and older held bachelor's degrees while only 17.6% of blacks age 25 and older did so.³⁴ This statistic is not simply a reflection of the fact that fewer blacks choose to enroll in college. According to Clifford Adelman, the degree completion gap for *students who enroll in* college between the two races remains at about 20%.³⁵

Moreover, this discrepancy cannot be explained away by differences in racial attitudes toward higher education or familial pressure to dropout. Adelman found that 'race' matters little in determining the degree completion gap; rather, a composite

³⁴ United States Bureau of the Census, *Educational Attainment in the United States: 2004*, "Percent of High school and College Graduates of the Population 15 Years and Over, by Age, Sex, Race, and Hispanic Origin: 2004," http://www.census.gov/population/www/socdemo/education/cps2004.html

³⁵ Clifford Adelman, Answers in the Toolbox: Academic Intensity, Attendance Patterns, and Bachelors' Degree Attainment, (Washington DC: U.S. Department of Education, 1999), 4.

measure of 'academic resources' (high school curriculum, test scores, and class rank) is a much better predictor.³⁶ In other words, fewer blacks graduate from college, not because they are black, but because they lack the skills needed to succeed in higher education. This relationship is reinforced by the findings of Jencks and Phillips in their analysis on eventual college graduation rates for 12th graders of the year 1982 in "High School and Beyond 1992 Follow-up." ³⁷ When they controlled for socio-economic background and test scores, among blacks and whites with the same test scores blacks were actually more likely to finish college. This suggests, then, that if blacks were equally prepared academically they would do as well or better than whites in higher education. Thus, closing the achievement gap may equalize disparities in college graduation rates—and, by extension—disparities in income.

Indeed, equal education is linked to equal earnings. Although critics of Human Capital Theory contend that colleges and universities teach few, if any, of the actual skills needed for success in the labor market, the relationship between an individual's educational investment and his or her income is clearly observed. ³⁸ A bachelor's degree holder earns, on average, \$2.1 million over his or her working lifetime, while those with no education beyond high school earn an average of \$1.2 million.³⁹ It is important to note that it is the *degree* that matters: when one attends but does not graduate from a four-year school, the benefits of college diminish greatly. Drop-outs of four year schools

³⁶ Ibid., vi-vii.

³⁷ Meredith Phillips and Christopher Jencks, "The Black-White Test Score Gap: An Introduction," 7-8 ³⁸ For Human Capital Theory see: Alan J. DeYoung, *Economics and American Education: A Historical and Critical Overview of the Impact of Economic Theories on Schooling in the United States,* New York: Longman, 1989.

³⁹ Kathleen Porter, "The Value of a College Degree," *ERIC Digest*, Washington DC: ERIC Clearinghouse on Higher Education, 2002. http://www.ericdigests.org/2003-

actually earn less or the same as graduates of two-year colleges and are more likely to have student debt.⁴⁰

It seems, then, that the achievement gap is at least partly to blame for racial inequalities in America. Further, racial differences in test scores legitimize racial inequality by implicitly linking these practices to merit. Jencks and Phillips contend that "[r]educing the test score gap is probably both necessary and sufficient for substantially reducing racial inequality in educational attainment and earnings."⁴¹ Indeed, social justice demands that we end racial differences in achievement.

Knowledge Deficit

While the 'black-white achievement gap' is used most often to refer to the *difference* in performance between these two groups, it is important to remember what this difference really means: many black students lack particular skills (or sufficient levels of them) that white students do not lack. Not only does the average black child arrive at school less prepared to be successful than does the average white child, but, as the NAEP assessments and other measures show, this difference is not limited to the first years of school. Rather, the achievement gap—whatever its true causes are—is (at best) sustained over the next twelve years of schooling. During this time, then, what skills do blacks fail to acquire?

⁴⁰ Ibid.

⁴¹ Christopher Jencks and Meredith Phillips, The Black-White Test Score Gap: An Introduction," 5-6.

Blacks lag behind whites in every subject, yet their underachievement is particularly severe in the areas of literacy and reading comprehension.⁴² Indeed, the average black student lacks competency in the areas of language fluency, the ability to construct meaning from text, and the ability to communicate the meaning constructed from text.⁴³ Further, the average black 17-year-old has a vocabulary equal to that of the average white 13-year-old.⁴⁴

Deficits in verbal skills are especially harmful for students: reading comprehension is a prerequisite for the understanding of content knowledge.⁴⁵ Thus, because many black students lack strong literacy skills it is much harder for them to be successful in *any* subject—not to mention reading and writing.⁴⁶ Since these deficits in verbal ability persist throughout primary schooling, upon entering high school the average black student is still unprepared to meet stringent literacy requirements and to comprehend high levels of text. Moreover, because low levels of past performance lead to low expectations for future performance, it is likely that these students (and many teachers) feel that improving in the final years of school is beyond their ability.

⁴³ Yvette Jackson, "Unlocking the Potential of African American Students: Keys to Reversing Underachievement," *Theory into Practice* 44, no.3 (2004): 205.

⁴² Daniel U. Levine, Eric J. Cooper and Asa Hilliard III, "National Urban Alliance Professional Development Model for Improving Achievement in the Context of Effective Schools Research," *The Journal of Negro Education* 69, no. 4 (Autumn 2000): 309.

⁴⁴ Meredith Phillips, James Crouse, and John Ralph, "Does the Black-White Test Score Gap Widen after Children Enter School?" 230.

⁴⁵ Levine, Cooper, and Hilliard III, "National Urban Alliance Professional Development Model for Improving Achievement in the Context of Effective Schools Research," 310.

⁴⁶ George Farkas, "Racial Disparities and Discrimination in Education: What Do We Know, How Do We Know It, and What Do We Need to Know?" 1121.

According to Phillips, Crouse, and Ralph if we could eliminate the knowledge gap in Kindergarten, we could reduce the 12th grade gap by half.⁴⁷ Indeed, every effort should be made to insure that both black and white children arrive in school ready to learn; nevertheless, unequal starting points should not have to mean unequal ending points. Educators must strive to improve students' skills at all levels of school, including high school. In fact, it may be *more* effective to target students at different ages rather than limiting our focus to pre-kindergarten students. Pre-school boosts achievement in early grades but the effects seem to fade after several years.⁴⁸ Further, NAEP long term trend scores for the three distinct age groups do not follow the same patterns, suggesting that we may be able to improve achievement in later grades, and not necessarily only in the earliest years.⁴⁹ Low literacy levels of black high school students should not be accepted as a matter of course-they should be attacked with creativity and gusto.

III. Theatre and Literacy

Research on Theatre and Literacy

While there is significant interest in and speculation on the ability of the arts to have positive effects on academic achievement, true experimental research on the subject is rare. Many claims are made that the arts are linked to higher achievement but, while suggestive, these claims are too often based on correlational evidence. In such cases we cannot tell "whether the arts cause academic improvement, whether academic

⁴⁷ Meredith Phillips, James Crouse, and John Ralph, "Does the Black-White Test Score Gap Widen after Children Enter School?" 257.

⁴⁸ David Grissmer, Ann Flanagan, and Stephanie Williamson, "Why Did the Black-White Score Gap Narrow in the 1970s and 1980s?" 188. ⁴⁹ Ibid.

achievement causes involvement in the arts, or whether study of the arts and achievement in academics are both caused by some third independent factor.⁵⁰ In the area of theatre, however, there is not only particularly strong correlational evidence, but substantial experimental evidence as well that the study of this art form can improve verbal skills.

Correlational Evidence

The supposed relationship between scores on the Scholastic Aptitude Test (SAT) and study of the arts is among the most often invoked 'evidence' that the arts boost academic achievement. Indeed, using responses from the Student Descriptive Questionnaire on the SAT, Kathryn Vaughn and Ellen Winner analyzed twelve years of SAT scores (1987-1998) and found that a high level of arts involvement (four or more years) is associated with higher SAT scores.⁵¹ However, this simple association does not mean much and the writers themselves caution against using it as evidence of a causal link: the students who take arts classes may have been smarter or more motivated than their peers to begin with.

Nevertheless, Vaughn and Winner found some interesting differences in scores between the various art forms. Based on student responses regarding specific art coursework taken, the authors determined that out of eight major art forms—acting, drama appreciation, music history/theory/appreciation, music performance, studio

⁵⁰ Ellen Winner and Monica Cooper, "Mute Those Claims: No Evidence (Yet) for a Causal Link between Arts Study and Academic Achievement," *Journal of Aesthetic Education* 34, no. 3 – 4 (Fall/Winter 2000): 14.

⁵¹ Kathryn Vaughn and Ellen Winner, "SAT Score of Students Who Study the Arts: What We Can and Cannot Conclude about the Association," *Journal of Aesthetic Education* 34, nos. 3 – 4 (Fall/Winter 2000): 80-81.

art/design, art history/appreciation, and dance—students who participated in *acting* courses had higher SAT scores in both math and verbal sections of the SAT than did participants in any other art form.⁵² If, then, one argues that the arts are linked to higher achievement because only smart and driven students enroll in arts courses, this finding—because it allows us to 'control' for such self-selection bias by looking only at the scores of students who choose to study the arts—indicates that acting has a real positive effect on SAT scores.

Vaughn and Winner also found that the average composite SAT score for students who have taken four years of any type of arts course is 952, compared to the average score of 886 for students with no arts course work.⁵³ Moreover, the authors found that students' scores increase with each additional year that they study the arts.⁵⁴ One argument against this perceived relationship between greater arts involvement and increased achievement, however, is that heavy involvement in any subject or discipline has been linked to higher SAT scores.⁵⁵ In other words, it is not the arts themselves—but rather the dedication to one activity— that leads to higher SAT scores. If this is true, the fact that the average score for students with *any amount* (one to four years) of acting coursework is 968—16 points higher than the average score of 952 for students with *four years* of any art—is particularly noteworthy.⁵⁶

⁵² Ibid., 82-83.

⁵³ Ibid., 79.

⁵⁴ Up to four years.

⁵⁵ Vaughn and Winner, "SAT Score of Students Who Study the Arts: What We Can and Cannot Conclude about the Association," 87.

⁵⁶ Ibid., 80-81; 85. When compared to no arts, the effect size of drama on verbal and math scores is r = .28 and r = .26, respectively. Conversely, the effect sizes found when 4 years of any type of arts involvement compared with no arts involvement: r = .19 for verbal scores and r = .11 for math.

While Vaughn and Winner's analysis of SAT scores suggests that the dramatic arts may have a real positive effect on academic outcomes, the link is still based on correlational evidence and as such must be viewed with skepticism. It is possible, for instance, that the most motivated students are attracted to acting more often than they are to other art forms. Nevertheless, a real relationship between acting, which is centered on making sense of text, and higher scores on a test of reading and math comprehension is plausible. Moreover, experimental evidence supports this link.

Experimental Evidence

Using 80 experimental and quasi-experimental studies, Ann Podlozny undertook the largest and most comprehensive meta-analysis (a synthesis of existing studies) to date on the relationship between drama instruction and academic achievement.⁵⁷ Podlozny focused on the relationship between theatre and seven different measures of verbal achievement: oral measures of story understanding, written measures of story understanding, reading achievement, reading readiness, oral language development, vocabulary, and writing. Across studies, Podlozny found average effect sizes ranging from r = .14 to r = .47 and, for all but one verbal outcome, she was able to reject her null

⁵⁷ Ann Podlozny, "Strengthening Verbal Skills Through the Use of Classroom Drama: A Clear Link," *Journal of Aesthetic Education* 34, nos. 3 – 4 (Fall/Winter 2000): 239-275. Podlozny queried ERIC, PsycLit, LLBI, DAI, MedLine and AHI computer databases from their years of inception until 1998, hand-searched 41 journals, and requested studies form over 200 arts educators. Out of the 265 possible titles this search generated, 80 studies (38 published and 42 unpublished) met her criteria (empirical, experimental in design, etc.). Thus, not only is her meta-analysis the largest ever completed on the subject but, through her inclusion of so many unpublished studies, she helps control for the 'file-drawer effect'.

hypothesis and conclude that *there is a positive relationship between drama and verbal ability*.⁵⁸

Podlozny's findings suggest that theatre may be a particularly effective method through which to impart the verbal skills that many black high school students lack. When she looked at 17 studies that focused on the effects of theatre on written measures of story understanding, Podlozny found an average effect size of r = .47. In other words, if an experimental group of 100 students used drama to understand a text and a control group of 100 students did not use drama, 74 of the drama and 26 of the non-drama students would be expected to perform at a high level.⁵⁹ The effect size she found for the effects of drama on writing achievement measured through writing samples, r = .29, would mean that given the same number of participants, 65 drama and 35 non-drama students would perform at a high level.⁶⁰ Reading comprehension and writing are areas of particular concern for many black high school students.

Among Podlozny's most significant findings: when participants who used drama to improve oral story understanding, language development, vocabulary, and writing were tested on comprehension of *texts that they did not actually perform*, these scores were equal or better than the scores for works they did act out. "The finding that enacting one text makes a new text more comprehensible demonstrates the power of drama to

⁵⁸Effect sizes reported for Podlozny's analysis are mean effect sizes, weighted by the size of the study. A general guideline for interpreting effect sizes is: .2 = small; .5 = medium; .8 = large.

⁵⁹ Ibid., 249. Podlozny notes that she "followed Rosenthal who shows that the rate of expected high achievement for the treatment group is .50 + mean r/2. The rate of expected high achievement for the control group is .50 - mean r/2. (Robert Rosenthal, "Writing Meta-Analytic Reviews," *Psychological Bulletin* 118, no.2 [1995]: 183-92). To ensure that sums equaled 100, [she] rounded before adding or subtracting (i.e., .50 - .19/2 became .50 - .10)."

⁶⁰ Ibid., 262.

develop text comprehension skills that transfer to new material."⁶¹ Indeed, theatre appears not only to have the ability to increase understanding of texts that are acted out but also to teach skills that can be transferred to other areas and domains. This has implications for improving performance on traditional academic measures.

Additionally, Podlozny found that drama is effective for diverse populations of students. In five of her seven meta-analyses she found drama to be an equally effective means to enhance verbal ability among all age groups—not just young children.⁶² This offers support for the use of theatre in high schools. Perhaps more importantly, Podlozny discovered a linear relationship between the size of the effect and the type of population: low socio-economic group participants had the highest effect sizes, followed by remedial readers, and 'average' populations had the lowest.⁶³ This suggests that teaching verbal skills through theatre may be most effective for students who have yet to engage in the acting; because poorer students are less likely to have been exposed to theatre elsewhere, they derive the most benefit.

It is important to note that Podlozny's meta-analysis is a synthesis of all (or very nearly all) published and many unpublished experimental and quasi-experimental studies conducted on the relationship between theatre and verbal skills. Her general thoroughness and inclusion of unpublished works (which typically find no relationship) make this meta-analysis strong evidence for theatre's role in enhancing verbal skills. Though there is, of course, still a need for additional studies in this area, Podlozny's

⁶¹ Ibid., 248. ⁶² Ibid., 239-275.

⁶³ Ibid., 253.

findings suggest that teaching literacy through theatre is a potentially effective way to cultivate literacy skills and that it may be most useful for students who, whether from lack of opportunity or lack of interest, have yet to master the domains of reading and writing. In other words, theatre may help close the black-white achievement gap in literacy—even as late as high school.

Theatre and Literacy – The Process

Winner and Cooper point out that most existing research on the arts and academic effects is focused on outcome rather than process and that little is known about what exactly may lead to the observed positive effects of the arts on academics.⁶⁴ It is thus imperative that we identify the why's and how's of theatre's effectiveness in order to make the most use of it in the classroom. In the following section I will attempt to outline the processes through which the verbal skills of students (disadvantaged minority high school students, in particular) might be improved through the use of theatre. The nature of dramatic texts, the processes undertaken while reading a script, and the public performance measures inherent to theatre education are a unique means of cultivating reading and writing skills in students who lag behind their peers in measures of literacy.

Play scripts bear little resemblance to thick novels; in plays, objectives are met and plots unfold in substantially fewer pages than in typical books. Moreover, dramatic texts, because they are broken up into accessible blocks of dialogue and are suited to acting out, are less intimidating and therefore more appropriate and effective for

⁶⁴ Ellen Winner and Monica Cooper, "Mute Those Claims: No Evidence (Yet) for a Causal Link between Arts Study and Academic Achievement," 65.

struggling readers than are traditional works of literature. The unthreatening structure of plays invites students who have previously feared reading the chance to delve into literature without fear of failure because, instead of reading alone, students are permitted—nay required—to explore the text together and actively. The individual burden of deciphering meaning thus becomes a group adventure as finally the two-dimensional words and concepts come alive and thus become easier to understand.

Rehearsal is a natural laboratory for literacy skill improvement. Dramaturgy, identification with characters, understanding of plot, and repetitive readings— elements essential to the theatrical rehearsal process— facilitate understanding of literature. Like professional actors, students must understand a play's context and history in order to make appropriate choices on stage. As students cultivate this knowledge through dramaturgy work, they also gain valuable insight into what forms the piece as a work of literature. Moreover, when students undertake the reading of a play as a dramatic activity, they do so as characters. This is true in all degrees of preparation—from the first read-through of a script to the final dress rehearsal the day before the production. In theatre education, then, the heretofore straightforward act of reading words becomes an experience which forces students to identify with the character to which they are assigned.

Likewise, students gain an increased understanding of plot and dramatic action through the rehearsal process. It is absolutely understood that to prepare properly for a performance, students must read plays over and over; this is, after all, the essence of rehearsing. This repetition helps students who do not easily grasp things the first time:

28

each time students read a script they invariably make choices about meaning and technique. The sheer amount of time dedicated to text in theatre education is helpful in generating understanding of ideas and concepts. For students who have struggled for years to understand text in school, any means of increasing their understanding is extremely valuable.

The 'threat' of performance behind every reading of a dramatic text provides built-in high expectations for students and gives them motivation to succeed. Approaching a text with the intent of public presentation means that the students *must* understand the work so thoroughly that they can replicate the same intentions and emotions on stage: in theatre, there is no place to hide. Further, when students know that the plays will be acted out—whether in the classroom or in front of family and friends—they will have a heightened interest in both being able to read and in having the proper understanding of the texts. Indeed, to fail to understand a work in front of an audience means more than personal academic failure—it means public embarrassment and letting down your peers.

Finally, approaching any type of literature as a 'play' opens up exciting possibilities. Acting is fun! And beyond acting, performances can mean involvement in things like make-up, costumes, and props. These components of production and design can grab the attention of students who, for myriad reasons discussed earlier, have

29

heretofore not been fully engaged in textual material.⁶⁵ Thus, by approaching texts as a dramatic activity, it may be possible to engage even the most hesitant students in reading.

Beyond these many direct benefits, texts studied as dramatic works can easily be extended for use in 'traditional' academic settings. When students are involved in a play they are engaged in a text with which they become intimately familiar and, from which they often have lines committed to memory. What a rich resource for teachers! Indeed, using plays that the students enjoy and know well can ease the otherwise painful process of improving vocabulary, reading, and essay writing skills.

⁶⁵ Thabiti Akil Brown, *Codman Academy Charter School: Papers by Faculty*, "Jumpstarting Literacy Through Immersion in Theatre: Codman Academy Charter School and the Huntington Theatre Company," www.Codmanacademy.org/main/files /up link/Brown.html

IV. The Partnership

A recently created partnership between the Codman Academy Charter School and the Huntington Theatre Company makes use of the above processes in a mission to improve student literacy skills. The continuing success of this endeavor offers persuasive evidence for the power of theatre to close the achievement gap.

The Partners

Codman Academy Charter School

The Codman Academy Charter School, located on the Codman Square Health Center site in Dorchester, Massachusetts opened in September 2001 with an inaugural class of 29 9th grade students. Now in its fifth year, the school serves approximately 120 students in the 9th-12th grades. A reflection of Dorchester, the school is 86% black, 11% Hispanic, 2% Asian, and 1% white. Additionally, 77% of the students are designated as low-income.⁶⁶

According to the Massachusetts's Department of Education, a charter school is a:

"public school that is managed by a board of trustees and operated independently of any school committee under a five-year charter... It has the freedom to organize around a core mission, curriculum, theme, and/or teaching method and to control its own budget and hire (and fire) teachers and staff. In return for this freedom, a charter school must attract students and produce positive results within five years or its charter will not be renewed."⁶⁷

⁶⁶ Massachusetts Department of Education, "Codman Academy Charter Public School Directory Information," http://profiles.doe.mass.edu/home.asp?mode=so&so=3608-13&ot=12&o=3605&view=all

⁶⁷ Massachusetts Department of Education, "Charter Schools Question and Answers," http://www.doe.mass.edu/charter/ganda.html

As a charter school, then, Codman Academy is a public school open to all high school-aged students who reside in Massachusetts, with priority given to Boston residents. Before students apply to the school, however, they are required to attend an information session with their parents. During this session the potential students and their families learn that enrollment in Codman is a significant commitment: staff members hold students to very high expectations, insist on a constant sense of community and trust (e.g. there are no lockers) and demand respect for both adults and other students. Uniforms are required and the school day lasts from 9:00-5:00 five days a week and from 9:00-12:00 on Saturdays. The school is centered on the principles of the Expeditionary Learning Model, which advocates 'learning by doing'.⁶⁸ Thus, students at Codman are expected not only to achieve high passing grades in core academic classes, but also to engage in arts, to play tennis, to complete a community internship, and to submit an extensive culminating project as a graduation requirement. In addition, the school demands a healthy lifestyle from the students: students and staff alike walk everywhere and are encouraged to eat healthy foods during school time. Students who enroll in Codman Academy, then, make a serious commitment to their education and to their future.

Founder Meg Campbell decided to open the school out of a desire for the students in her neighborhood to succeed—not just in high school, but also in college and in life. Campbell knew, from the beginning, that the most difficult challenge to overcome would be the low literacy levels of her students. Indeed, initially 80% of Codman's first class

⁶⁸ See the Expeditionary Learning website for additional information. http://www.elob.org/

tested below average for their grade level in reading.⁶⁹ To effect the quick and drastic improvement in the students' literacy skills needed to make them viable candidates for college, Campbell needed something major. Remembering her daughter's positive experiences at the Huntington Theatre Company, as well as past readings on theatre and achievement, she had an idea.⁷⁰ Campbell contacted the Education Department at the theatre and proposed creating a partnership between the two organizations: Codman Academy's entire language arts curriculum would be centered on and learned though the Huntington's plays.

The Huntington Theatre Company

The Huntington Theatre Company is a professional theatre company located in Boston, Massachusetts. The theatre, which opened in 1982, is in the midst of its 24th season and was recently expanded to include a new theatre space in the South End of Boston. The Huntington Theatre Company's relationship with the Boston community is maintained through the theatre's Education and Outreach Department. According to the Education Department's mission statement, the department exists to "foster and support a direct and passionate engagement for youth, educators, artists and the broader community in all aspects of the theatre experience."⁷¹

To fulfill this mission the Education Department oversees a variety of programs in the Boston area, of which the most well-known is the Student Matinee Series. Through

 ⁶⁹ Emc.Arts, LLC, *Huntington Theatre Company Program Evaluation: Huntington/Codman Partnership*, Project Director Richard Evans, September 2005, 19.
 ⁷⁰ Ibid., 5.

⁷¹ Huntington Theatre Company, "Department of Education 2004-2005 End of Year Report," (Internal Document), 2005, 1.

the Student Matinee Series, the Department offers subsidized tickets for special schoolday performances of Huntington productions to local schools. The Education Department also offers after-school acting classes for high school students, which include: *The Acting Class, The Acting Class, Too*, and *Scene Study*, as well as a playwriting course called *Young Voices*. Middle school students are taught about theatre through *First Act* classroom visits and the Department's *Know the Law* Program brings together students who develop and present a play to their peers about the consequences of breaking the law. *STAGES: Storytelling For The Ages* is a program through which the Department engages community members in a collaborative process that culminates in a multidisciplined presentation of Bostonians' stories. The new relationship with the Codman Academy proposed by Campbell would become the most ambitious of these many endeavors.

Overview of the Partnership

The partnership, currently in its fifth year, has an annual budget of \$35,765, \$10,000 of which is provided by Codman Academy and the remainder by the Huntington and outside grants.⁷² Students from all four grades at Codman—9th, 10th, 11th, and 12th—attend each play free of charge offered through the Huntington's Student Matinee Series, yet Codman students are most heavily involved with the Huntington during their 9th and 10th grade years. During these two years the students spend a great deal of time

⁷² Catherine Robe Schumacher, "Proposal to EdVestors and the Fund for Nonprofit Partnerships: Huntington-Codman Academy Charter School Partnership, 2004-2005," (grant proposal), 2004. This figure excludes personnel expenses.

learning through and about theatre both on site at the Huntington and at Codman. Students are admitted to Codman in the 9th grade only; thus all students enrolled in the school complete their first two years of high school English language arts through the Huntington Theatre Program.⁷³

The key to the partnership is that it is a collaborative relationship. While the students are at the theatre, one member of the Huntington's Education staff serves as the students' primary teacher. While at Codman, the students' Humanities teacher uses the texts that the students work on at the Huntington as a basis for study and instruction in the classroom. These two co-teachers maintain a high level of communication with each other and work closely together while planning the students' curriculum. In addition, the student's Humanities teacher comes to "Theatre Days" with the students while the Huntington staffer regularly makes in-school visits at Codman. This rapport allows the teaching teams to plan curricula effectively and to make informed decisions that keep the program running smoothly.

Intro to Theatre

Many Codman students enter the school hesitant to read and lack the skills needed to comprehend text. Thus, the goal of the partnership is to use theatre as a way to excite the students about literacy *and* as a means to actually teach the skills needed to be a successful reader and writer. According to Melinda Jaz, one of the Huntington teachers, "literacy is the overall goal [of the Theatre Days]. That's what my training is in—90% of

⁷³ Excluding the small number of LTI (Learning Through Internship) students.

what I do with them, I would say, is with literacy in mind."⁷⁴ Literacy is the overall goal, but theatre is the means to the end. The staff hopes to "…engage students in a classroom with the text by first getting them hooked on all of the fun aspects that go into theatre production."⁷⁵ Thus, along with studying texts, students engage in activities intended to connect them to and make them comfortable with aspects of the theatre. Ultimately, these activities help reach the goal of enhanced literacy: theatre draws them in, theatre is used to teach, and students are able transfer the skills they have learned to the classroom and to academic performance measures.

Twice a month the 9th and 10th grade Codman students come to the theatre for daylong sessions with Huntington staff and visiting artists. Students are responsible for travel to and from the theatre and most use public transportation (the school provides passes) while others are driven or walk. Although the visits to the theatre occur only twice a month, these Theatre Days generally last from 9:00 in the morning until 5:00 in the evening—longer than a typical school day for most American students. The students, therefore, have ample opportunity to experience a large range of material during their time at the Huntington Theatre.

Given the nature of the program it is difficult to describe a typical Theatre Day at the Huntington; indeed there is no such thing! On some days students attend a play, on other days they meet artists from the community, on others they spend the entire day rehearsing. Despite such variety, a Theatre Day always begins with breakfast, which is

⁷⁴ Melinda Jaz, personal communication, January 9, 2006.

⁷⁵ Schumacher, "Proposal to EdVestors and the Fund for Nonprofit Partnerships: Huntington-Codman Academy Charter School Partnership, 2004-2005," 3. Staff comment

set out before the students arrive to the theatre so that—regardless of whether or not students are able to eat breakfast at home—all will be fed. Students usually work until noon, have an hour for lunch, and then return to work until the early evening.

Most Theatre Days begin with Warm Up, which is intended to engage students, to teach basic components of acting, and to help create a sense of ensemble among the class. Often led by outside artists such as members of Boston's Improv Asylum and Express Yourself or local actors, *Warm-Up* time includes vocal and physical exercises, as well as theatre games and improv. To warm up their voices students may recite tongue twisters; to warm up their bodies, renditions of "Shake Out" (shaking body parts one at a time) are common. Games like "Faint by Numbers" (when the instructor shouts out a number students with assigned number faint and others aid them) and "Mimic" (students imitate instructor) are fun ways to improve students' acting skills. Other activities—"Count to Ten" (students must count together, in a random order, without having more than one student speak at the same time) and "Tableaus" (frozen pictures students create with their bodies)—help students learn to work together. Sometimes specific Warm Up games are used to introduce new units. When beginning their study of Shakespeare, the students played "Shakespearean Insults," a game in which they tried to out insult each other with their own versions of Shakespeare's zingers, such as "Thou pribbling mild-livered moldwarp!."76

For most of the students, especially those in the 9th grade, Theatre Days are the only time they have ever spent at a theatre. Thus, the Huntington staff uses *Know the*

⁷⁶ Melinda Jaz, curriculum, November 1, 2004.

Theatre segments to introduce the students to the various departments within the theatre and to the spaces at the Huntington. For example, the Production Department might give the students a backstage tour and discuss technical work while the Marketing Department might do a presentation on posters that focuses on audience development. As students come to understand how the theatre operates, they are better prepared for their own performances.

It is also important that the students learn basic theatre vocabulary so that they are able to express themselves properly while rehearsing and reading texts. Therefore, *Know the Theatre* time is also used to teach students words and concepts such as: *aside*, *blocking*, *cue*, *improv*, *motivation*, *run-through*, *stage business*, *strike*, *subtext*, and *upstaging*. Students are expected to draw on these words when writing about or discussing plays and are also quizzed on their understanding of the words.

Of course, Codman students attend all (or very nearly all) student matinees of the Huntington shows. For many Codman students it is during these performances that they begin to get really excited and motivated about the possibility of being the one up on stage—no matter what work (e.g. reading) they have to do to get there. Moreover, since the students spend so much time at the theatre, they are often invited to rehearsals of the Huntington's productions in the weeks leading up to the show's opening and thus get to witness the transformation process from rehearsal to show.

When Codman students attend a student matinee they not only receive the benefit of a post-show discussion with the cast, but often they get to meet with the actors or playwright outside of the theatre. Members of the *Ain't Misbehavin'* cast even traveled

38

to Codman Academy to meet with the students.⁷⁷ When *Breath, Boom*, a play that focused on girl gangs, was staged at the Huntington, Codman students were able to meet and ask questions of the playwright, Kia Corrinth. Sometimes the students even perform for the actors. During a lunch with actors from the cast of *Marty*, students shared scenes they had just re-written for homework. According to the teaching assistant at the time "the kids were so excited—and the actors were actually receptive!"⁷⁸

Whenever possible, the staff at the Huntington seeks out opportunities that get the students excited about acting. Therefore, it is not surprising to walk in to the room and see thirty Codman students sword-fighting. Indeed, the Huntington often brings in outside artists such as stage combat teachers or dance coaches to work with the students on skills of particular use in the theatre. A graffiti artist has even come in to work with the students on designing posters for a show. Special events, such as the Renaissance Faire (students assume the role of a Renaissance character all day) are fun for them as well.

At some point in each Theatre Day a period is set aside for *Journal Time*, during which students address a question in their journals. Sometimes students are asked to reflect on the show they saw that day. For example, after attending a student matinee of Sonia Flew (a play about war) the students were asked "How do you personally feel about war: is it a responsibility or a rebellion? Did you relate to one character in Sonia *Flew* more than to another?"⁷⁹ Other times, they are asked about the acting work they

⁷⁷ See "Letter to *Ain't Misbehavin'* Cast" in *Appendix A*..
⁷⁸ Ellie Spensley, observation notes, November 8, 2002.

⁷⁹ Melinda Jaz, curriculum, November 19, 2004.

have done that day: "What was the goal and obstacle of the character that you played in your scene today?"⁸⁰ After each Theatre Day a Huntington staff member reads and responds to each student's entry. Thus through Journal Time a dialogue is established between the student and teacher.

The Huntington staff demands the same amount of respect from students that the students give their teachers at Codman. In fact, all of the school's rules, such as uniforms, are in effect while students are at the Huntington.⁸¹ Boundaries and expectations are set early: the Huntington teacher hands out rubrics so that students know what is expected of them. Further, the students are assigned homework from the Huntington staff and receive a grade for their time at the Huntington, which is factored in to their final Humanities grade. As at Codman, Theatre Days end with Kudos and Deltas, a period of reflection on both the positive points of the day as well as on things that can be improved.

Intro to Literacy

All of the students' time at the Huntington is ultimately aimed towards literacy. While playing games, touring the theatre, learning about acting and production, watching plays, and meeting artists and administrators are all fun activities, they also "lead the students to [ask] questions about the characters, the flow of the play, and the author's intentions in creating the piece."⁸² Indeed, these activities are wonderful supplements to

 ⁸⁰ Ellie Spensley, observation notes, October 25, 2002.
 ⁸¹ Lynne Johnson, personal communication, January 12, 2006.

⁸² Emc.Arts. LLC, Huntington Theatre Company Program Evaluation: Huntington/Codman Partnership, 8.

the reading and studying of plays. It is during the time that students spend deeply engaged in dramatic texts at the Huntington that they build skills needed for reading comprehension, constructing meaning, and accepted language fluency. At Codman they apply these skills to their academics.

The Texts

Each season the Huntington Theatre Company stages between five and seven major productions, the majority of which are presented as student matinees that are attended by Codman students. In addition to preparing for and seeing all of these major productions, students complete in-depth textual work on two or three principal dramatic works each year. Given the amount of time students spend with these plays, choosing these 'focus' works for the students involves careful consideration. The works may be selected from the Huntington's regular season or from a canon of past works staged by the company. They must have educational merit and should tie into Codman's overall curriculum as much as possible.

When the Huntington announces each year's season, the leaders of both organizations meet to discuss the best choices for the students' focus works. Some of the main stage plays chosen as primary texts in past years include *The Dead* (James Joyce), *Heartbreak House* (Bernard Shaw), *Nixon's Nixon* (Russell Lees), *A Month in the Country*, (Ivan Turgenev), *Marty* (Rupert Holmes), *Breath, Boom* (Kia Corrinth), *Ain't Misbehavin'* (Fats Waller), and *Gem of the Ocean* (August Wilson). From the Huntington's past shows, the partnership has chosen *A Raisin in the Sun* (Lorraine

41

Hansberry), To Kill a Mockingbird (Harper Lee), and As You Like It (William

Shakespeare) among others.

According to Codman Academic Dean Thabiti Brown, it is important to choose works which speak to students' experiences. Brown notes that

"When that first year we began with *The Dead* it was all foreign. The kids looked at us like we were crazy. *Raisin in the Sun* was second and suddenly they were fighting to read—reading ahead. There was this excitement and they were so into it. This was when I first thought 'wow'. I have rarely seen kids take to a text that well."⁸³

Indeed, plays like Breath, Boom, Gem of the Ocean, A Raisin in the Sun, and To

Kill a Mockingbird with strong black and Hispanic characters, are plays to which Codman students can easily relate. It is important to choose such works: identifying with characters can provide added incentive for reading. At the same time, however, works with which students are less familiar or comfortable, such as the 1950's-era musical *Marty* or Shakespeare's *As You Like It*, are also effective choices. As Brown notes: "In our experience...as students become more comfortable with reading plays and spending time at the Huntington, the number of variables they have to deal with is reduced and so too is the impact of difficult content."⁸⁴ Thus it has become something of a tradition for each incoming class of 9th graders to begin intensive textual work using *A Raisin in the Sun*. After this initial play students will be exposed to a wider range of material.

⁸³ Thabiti Akil Brown, personal communication, November 3, 2005.

⁸⁴ Brown, "Jumpstarting Literacy Through Immersion in Theatre: Codman Academy Charter School and the Huntington Theatre Company."

Approaching the Dramatic Works

In order to improve the literacy skills of Codman students, it is imperative that the students feel motivated to and capable of reading text. Plays, which are dialogue-based, and are rich in content without being excessive in length, are the perfect medium through which to inspire students to tackle difficult literary concepts. Students read the majority of each assigned play at Codman and at home; however, a great deal of reading is also completed at the Huntington. Often this is done through "round-table group reading," wherein the Huntington teacher assigns each student to read the part of a character in the work. Brown notes of this structure: "They do well-even those who can't read—because they prepare at home, they are willing to."⁸⁵ Indeed, round-table group reading is an effective strategy for several reasons. It is particularly appealing for students who are not skilled readers: reading the lines of just one character for several scenes is a more realistic goal for many students than is reading several pages out-loud at one time. Also, the group dynamic of the round-table is important: indifferent students can benefit greatly from reading with more enthusiastic peers. For example, in a class I observed of 9th grade students reading A Raisin in the Sun, the two students assigned to read the roles of Ruth and Walter began reading with little excitement or engagement in the text; as a result the rest of class was not focused on the action occurring in the scene. However, as a third student assigned to the role of Travis joined the scene, and

⁸⁵ Thabit Akil Brown, personal communication, November 3, 2005.

immediately began speaking loudly and with feeling, the students reading Ruth and Walter adjusted to match his vigor. Soon the entire class was quiet and attentive.⁸⁶

Sometimes students first 'read' a work at the Huntington by creating team performances of a text. In one 10th grade class, immediately after receiving copies of Mat Smart's script *Hand, Foot, Arm, and Face*, students were divided up into groups to prepare scenes from the play.⁸⁷ 'Reading' in this way has important benefits for remedial readers. During the preparation period, students have ample time to become familiar with the text and to discuss with peers the important components of the scene. Because each group of students is responsible for only one small scene, the students benefit from intensive textual work on a select portion of the play. In addition—because all groups perform their scenes in front of the class— students get to see the key points of the entire work before attempting to read it themselves. Deciphering new texts as a group in this way can be more effective than leaving hesitant students to figure out a work alone.

Moreover, in preparation for each main stage Huntington production, Codman students read parts or all of the script, act out scenes, and discuss themes, characters, language, and other elements used by the playwright. Following this preparation, the students attend a performance of the show on the main stage. During these performances abstract literary concepts become truly concrete. For example, in August Wilson's *Gem of the Ocean* the character of Citizen Barlow is tormented because he has watched a man die for a crime that he (Citizen) committed. Seeking repentance, Citizen visits the revered Aunt Ester. Aunt Ester tells him that in order to be redeemed he must go to the

⁸⁶ Class observation, October 13, 2005.

⁸⁷ Class observation, February 17, 2006.

City of Bones, which she describes as "a city...made of bones...pearly white...bones of people right there in the middle of the ocean."⁸⁸ Before attending the matinee performance of *Gem of the Ocean*, students had discussed the importance of the City of Bones, Wilson's ultimate image of African American pain and suffering. However, once the students saw Wilson's words brought to life on the Huntington stage—as Citizen, viscerally embodying the role of slave is taken on a journey across the Atlantic by Aunt Ester with the help of the other characters—students realized the full depth and importance of the playwright's image. Indeed, when abstract concepts such as 'imagery' materialize on stage, they become much easier to understand and to write about on paper. In journal entries following performances students often make these connections for themselves.

Reading as Rehearsal

Codman students perform constantly. They act out scenes in class, participate in speech and poetry competitions, and present end-of-semester showcases for their families and friends. In fact, everything they read will eventually be performed in one or more of these contexts. Therefore, every act of reading at the Huntington is, in effect, a rehearsal. Rehearsing—by definition— demands certain things of actors: you must understand the context of the work, you must identify with your characters and the plot, and you must read and re-read a work in order to memorize it.

⁸⁸ August Wilson, *Gem of the Ocean*, Sageworks, 2003, I.v.49.

Because they are approaching texts as actors, students must understand the circumstances that inform the works. Indeed, in order to make appropriate acting choices it is imperative that students have a thorough understanding of the context of the work in which they are involved, such as knowledge of the time period in which it is set and the author's intentions in writing the piece. Often, students gain this knowledge via a discussion with the Huntington's dramaturg (someone who is knowledgeable about plays, supplies information on productions, and interprets scripts). Brown notes the benefits of this interaction: "The natural flow [of such discussions] integrates History and English Language Arts/Drama and is naturally interdisciplinary and engaging, helping students gain historical knowledge to support their understanding of the play."⁸⁹

Students also study the context of plays with their Huntington teacher. Before Codman students read *Gem of the Ocean* in 2005, for example, they were introduced to the influences of playwright August Wilson. They viewed artwork by Romeare Bearden and listened to the song *Nobody in Town Can Bake a Sweet Jelly Roll Like Mine*, both of which August Wilson credits as having a profound impact on his writing.⁹⁰ This type of introduction can help students understand particular choices the author makes in writing the script. It thus facilitates thinking about important literary concepts such as tone and intention.

Another primary objective in rehearsals is for actors to develop their characters fully. Indeed, it is essential to determine *who* characters are and *what* motivates them to

⁸⁹ Brown, "Jumpstarting Literacy Through Immersion in Theatre: Codman Academy Charter School and the Huntington Theatre Company."

⁹⁰ Clarence Williams and Spencer Williams, *Nobody In Town Can Bake A Sweet Jelly Roll Like Mine*, Bessie Smith, vocals, 1923 or 1924.

act in order to portray them on stage. To facilitate this characterization, the staff at the Huntington incorporates textual analysis into the rehearsal process. For example, as part of rehearsal for *A Raisin in the Sun*, students must identify their character's dreams and aspirations by citing relevant information and quotations from the play and must identify their character's personality traits and temporary emotions by listing adjectives and explanations on a worksheet.⁹¹ Through such activities in rehearsal, then, students develop the important skill of constructing meaning from a text as they learn how to find textual support to form judgments about a work.

Similarly, while rehearsing it is important that students become familiar with the play's plot and that they learn how the overall sequencing of events affects their characters. Otherwise they might miss an entrance! At the Huntington many activities are used to foster this awareness, including "20 Lines".⁹² For "20 Lines" students break up into their scene groups and work together to narrow their scene down to 20 lines; after this they will perform the shortened version in front of the class. As students decide which lines are most important and which lines can be left out, they are forced to consider literary elements such as main idea and supporting details. After each group performs their 20 line scenes, the class as a whole must decide in what order the scenes occur in the play. This sequencing forces students to consider elements such as rising and falling action, climax, and denouement as well as their importance in a work.

Further, actors use rehearsal time to become extremely familiar with the words in a play and to memorize their lines. As actors, then, Codman students spend a great deal

⁹¹ See "A Raisin in the Sun Character Trait Chart" in Appendix A.

⁹² Melinda Jaz, meeting notes, September 2004.

of time going over the same piece of text. This in-depth reading fosters literacy: as the students read and re-read their scripts, they discuss everything from word choice to mood to the author's message. Moreover, even for experienced readers, works of literature often make more sense the second or third time that they are read than they did at first. This is especially true for students who are behind their peers in reading comprehension.

The 'Threat' of Performance

Rehearsing is, of course, completed in anticipation of *performance*. From the very first time that Codman students read a script at the Huntington, they are aware that they will perform the work. The students act during each Theatre Day, and the Partnership's student showcases are the crème de la crème of these student performances at the Huntington. The 9th and 10th grade students participate in two showcases each year, one in December (fall) and one in May (spring).

The fall showcase is built around the 'focus' work chosen for that semester. In the fall of 2005, for example, the 9th grade class presented a series of scenes from *A Raisin in the Sun* and the 10th grade class, who had spent the semester focused on *Romeo and Juliet*, presented a selection of Shakespearean monologues. The content of the spring showcase is more variable. The 9th graders and their Huntington teacher typically compile a collection of scenes, monologues, dances, and songs around a particular theme such as "I Dwell in Possibility." It is not uncommon for the 10th grade class to produce a student-written final showcase, as the Codman 10th graders did in 2005. As part of a learning 'expedition' with their Codman teacher, Aaron Schildkrout, these students completed extensive research on a world injustice and interviewed a survivor of this injustice; they then transformed these interviews into character monologues for the Huntington showcase. With the help of Huntington teacher Linda Sutherland, the students added a chorus and combined their monologues to create "The Eyes of the World are Watching Now."⁹³

The academic and personal high-stakes attached to the showcases provide intrinsic motivation for students to thoroughly understand the texts. Students receive a grade for their work on each showcase, which is determined using a rubric created by the Huntington staff.⁹⁴ Students receive a copy of the rubric in advance so that they know what to focus on. A student's showcase grade is comprised of 20% for Character Creation (how well the student understands and conveys his or her character's objective and emotions and how well the student understands the obstacles of the character), 20% for Stage Presence (student's voice, familiarity with the scenes), 20% for Performance Choices (how well the student understands the style, mood, and rhythm of the work), 10% for Commitment (student's willingness to make the show successful), 10% for Teamwork, 10% for Memorization, and 10% for Audience Skills. Their showcase grade not only makes up the largest portion of their overall Huntington grade, but is also factored into their final Codman Humanities grade. Thus, students have academic motivation to invest the time and energy needed to make the show a success.

⁹³ Codman Academy and the Huntington Theatre Company, "The Eyes of the World are Watching Now," (showcase script), May 2005.

⁹⁴ See "Huntington-Codman Showcase: Student Assessment" in Appendix A.

It is one thing to receive a failing grade for a poor performance; it is quite another to embarrass yourself in front of an audience of seventy-five because you do not understand your character. Indeed, performing in front of an audience is an important motivator for students: they must identify with their characters well enough to portray them effectively on stage. Thus, students are more apt to spend time outside of class reading and preparing than they would if they were not performing the text. Also, because they do not want to embarrass themselves by forgetting their lines or by making incorrect performance choices, students become particularly interested in memorization and in reading for understanding. Fear of 'leaving their peers hanging' on stage is also an important motivator and students work hard to avoid such a mishap: often, when students see someone in the class falling behind in preparation for the showcase they will volunteer to run lines or discuss a scene with him or her.

Learning at Codman

Podlozny's meta-analysis suggests that "drama does have the power to foster skills that then transfer to new material."⁹⁵ For this to occur, however, teachers must not only teach for deep understanding in the selected subject (e.g. theatre), but also must teach explicitly for transfer to the new subject (e.g. language arts).⁹⁶ Such 'teaching for transfer' is at the heart of the partnership. While at the theatre, students read, rehearse, and perform dramatic works. Through these experiences, students gain a clear understanding and high level of familiarity with particular texts. Then at Codman the key

 ⁹⁵ Podlozny, "Strengthening Verbal Skills Through the Use of Classroom Drama: A Clear Link," 266.
 ⁹⁶ Ibid., 268.

step—transfer—occurs: in Humanities class teachers use these texts to help students develop competency in 'traditional' English language arts tasks such as reading comprehension, vocabulary and language, and writing. Indeed, "the literacy-through-drama curriculum of the Huntington/Codman Partnership is the key tool [used] to get students up to grade level in reading, writing, and thinking about texts."⁹⁷

Students read plays at the Huntington and in class. At the Huntington reading is seen as a way to prepare for performance. At Codman, however, the focus is different. As one Codman teacher notes "...the Huntington days afford me the opportunity to use a non-traditional entry point to the texts we study [but] the traditional elements (reading, writing, and comprehension) are our focal points."⁹⁸ Indeed, at Codman the crux of reading is to understand texts as *literary* works. For instance, as students were rehearsing scenes from *Gem of the Ocean* at the Huntington, in class they were reading the play and explicitly focusing on three key "Reading Strategies" which lend themselves well to the text: Connect (connecting the text to other texts, to oneself, and to the world), Visualize (visualizing setting, characters, etc. during reading), and Question (prompting students to create their own questions from the text).⁹⁹ The time students spend acting in plays at the theatre enhances their ability to apply reading strategies such as these to the texts in the classroom. Moreover, the Huntington and Codman teachers strive to use similar

⁹⁷ Emc.Arts, LLC, *Huntington Theatre Company Program Evaluation: Huntington/Codman Partnership*, 17.

⁹⁸ Thabiti Akil Brown, "Jumpstarting Literacy Through Immersion in Theatre: Codman Academy Charter School and the Huntington Theatre Company."

⁹⁹ Melinda Jaz, "Notes from August 25th Meeting," 2004.

language with the students to make the connection between acting and reading comprehension clear.¹⁰⁰

In addition, all of the works chosen for use in the partnership include words with which students are unfamiliar. Through the rehearsal process, as students memorize their lines and develop their characters, they encounter new words and learn the meanings of these words within the context of the play. At Codman, the teachers expand the students' knowledge of these words beyond the context of the play. For example, students used words such as *impetus*, *ineffectual*, *tantamount*, *eccentric*, and *cynicism* while rehearsing scenes for *Heartbreak House* at the Huntington. At Codman, teachers had the students define these words and use them when writing. In fact, they were even tested on their ability to "[c]reate a story using the new words. Make sure that, according to the context, the meaning of the word is clear."¹⁰¹ This is an example of the mutual relationship that exists between theatre and English language arts: at the theatre students use words to speak, and in the classroom they use them to write. Presenting concepts in multiple domains in this way can increase comprehension.

Similarly, the Huntington plays are an effective means through which to teach students about literary devices. Plays—built on dialogue—teem with rich language. As actors, then, students must use this rich language as a vehicle to express their character's thoughts and emotions. Because students have actually *used* the language to achieve specific objectives in the life-like situation of plays, the plays themselves provide a great springboard for teachers to explain the importance of literary devices. Thus, as her

¹⁰⁰ Ibid.

¹⁰¹ See *Heartbreak House* Vocabulary Quiz A in *Appendix A*.

students worked on *Romeo and Juliet* at the Huntington, 10th grade Codman Humanities teacher Lisa Schneier used the play to reinforce the importance of simile, metaphor, alliteration, and onomatopoeia because "Shakespeare uses these things constantly."¹⁰² Scheneier noted that the time students spent rehearsing the play at the Huntington "definitely contributed to increased understanding"¹⁰³ of her lesson.

Teachers at Codman also find that—because of students' in-depth understanding of them—the Huntington plays are a great way to develop students' analytical writing capabilities. Thus, Codman teachers often use the plays in lessons on writing. For example, Humanities teacher Aaron Schildkrout employed *Gem of the Ocean* to teach students how to use supporting ideas and details effectively in an essay. Based on the following sentence: "Over the course of August Wilson's *Gem of the Ocean*, Citizen Barlow undergoes a spiritual journey in which he finds his true identity" Schildkrout created example paragraphs of varying strength. ¹⁰⁴ Students then had to explain what worked and what did not work in each paragraph. Because students were so familiar with *Gem of the Ocean* through their rehearsals and activities at the Huntington, they were able to focus on understanding the concepts of supporting ideas and details—rather than struggling to understand the text itself.

Similarly, Codman teachers often give students practice writing prompts based on Huntington plays. For example, Schildkrout instructed his students to use a character from *Hamlet* or *Gem of the Ocean* (they had worked on both at the Huntington) to write

¹⁰² Lisa Schneier, personal communication, February 17, 2006.

¹⁰³ Ibid.

¹⁰⁴ Aaron Schildkrout, "OR-Supporting Ideas-Details," *Curriculum: Expository Writing*, http://codmanacademy.org/branches/bestpractices/index.php?module=pagemaster&PAGE_user_op=view_page&PAGE_id=34

on the following prompt: "Select a character who struggles with society. In a welldeveloped composition, identify the character and explain why this character's conflict with society is important."¹⁰⁵ The next semester students were assigned the same prompt; however, this time they were to use *Things Fall Apart* by Chinua Achebe (a book they had read but not acted out) to answer the question.¹⁰⁶ Here then, students learned how to write a specific type of essay using a play they had acted out and then transferred this knowledge to text in general.

The Codman Academy/Huntington Theatre partnership is clearly using theatre in unique and promising ways to address students' low levels of literacy. But has this program been a success?

¹⁰⁵ Aaron Schildkrout, "Winter Final Examination Preparation Sheets," *Curriculum: Expository Writing*, http://codmanacademy.org/branches/bestpractices/index.php?module=pagemaster&PAGE_user_op=view_page&PAGE_id=32

¹⁰⁶ Aaron Schildkrout, "COMP Question 4," Curriculum: Expository Writing,

http://codmanacademy.org/branches/bestpractices/index.php?module=pagemaster&PAGE_user_op=view_page&PAGE_id=32

V. Measures of Success

Teachers at both the Huntington and at Codman believe that the partnership and experience with theatre have been beneficial for the students—in literacy and in other areas. According to one teacher, the "[i]nteractive activities at the theatre, coupled with supportive structures in the classroom, have proven to be an excellent strategy for teaching writing at Codman."¹⁰⁷ Another notes that "I believe the Partnership has increased students' test scores, and I have observed other impacts, too-a growth in personal poise, and also in the ability to 'find a voice' and to present information."¹⁰⁸ Students, as well, believe that the program has academic benefits. The Huntington and Codman administer joint assessment forms to the students at the beginning and end of each year in which they are involved in the program. Based on these forms, Emc.Arts evaluators found that over the course of the 2004-2005 school year, "student confidence in [literacy skills] increased at rates up to 10%..."¹⁰⁹

Opinions of staff and students alone are not sufficient to prove the partnership's success. However, Codman students also exhibit impressive performances on two different measures of literacy ability: the Degrees of Reading Powers Test and the English Language Arts Massachusetts Comprehensive Assessment System Exam. Taken together, Codman's results on these measures offer support for the effectiveness of theatre in closing the achievement gap.

¹⁰⁷ Emc.Arts, LLC, Huntington Theatre Company Program Evaluation: Huntington/Codman Partnership, 18. ¹⁰⁸ Ibid.

¹⁰⁹ Ibid., 20.

The DRP

The Degrees of Reading Power (DRP) Test is designed to measure students' reading comprehension abilities over time. There are seven levels of the basic (Primary/Standard) DRP test, which can be taken by students from 1st grade through high school as well as into adulthood. According to the company, over 4 million tests are administered each year.¹¹⁰ Also, the National Urban Alliance for Effective Education recommends the test as the best available means to determine student reading comprehension ability.¹¹¹ On the DRP, students read nonfiction passages from which several words have been omitted; they must then choose the correct word that best expresses the meaning of the text from a set of multiple choice options.¹¹² The DRP links students' scores to the difficulty levels of actual text with the DRP Scale of Text Difficulty, an instrument used to assess the difficulty level of textual material.¹¹³ Students' scores are converted from raw scores and reported on a scale ranging from 15 to 99.¹¹⁴

Meg Campbell chose the DRP Test as a gauge for the reading skills of in-coming Codman students and as a continual assessment tool to measure students' progress in reading comprehension because it is a reliable nationally normed test.¹¹⁵ According to

¹¹⁰ TASA: Degrees of Reading Power (DRP), "Features of Primary and Standard DRP Tests," http://www.tasaliteracy.com/drp/drp-main.html

¹¹¹ Eric J. Cooper and Daniel U. Levine, "A Comprehension and Cognitive Development Approach to School Reform," *The Journal of Negro Education* 62, no.1 (Winter 1993): 93-4.

¹¹² TASA: Degrees of Reading Power (DRP), "Primary and Standard DRP Tests," http://www.tasaliteracy.com/drp/drp-main.html

¹¹³ TASA: Degrees of Reading Power (DRP), "Introduction," http://www.tasaliteracy.com/drp/drpmain.html

 ¹¹⁴ Cooper and Levine, "A Comprehension and Cognitive Development Approach to School Reform," 95.
 ¹¹⁵ Patricia Mora, "An Analysis of Reading Growth over Time at Codman Academy Charter Public School: DRP Results Fall 2001 – Spring 2004" (master's thesis, Harvard, n.d.), 2.

the "Codman Academy Charter School Accountability Plan," it is one of the school's academic objectives that "by graduation, students should increase reading proficiency as assessed by the Degree of Reading Powers to read at or above grade level."¹¹⁶ Thus, Codman Academy administers the DRP Test to all students when they first enter the school, and again at the end of each school year. The aim is for all students to be at 63 on the Independent level (90% comprehension) by graduation, which is the 50th percentile rank nationally.¹¹⁷

Several features of the DRP make it a strong choice by which to judge the effectiveness of the partnership in increasing students' reading comprehension skills. First, because scores are linked to actual text, test results provide an unambiguous picture of exactly the level of material students can understand. Second, the DRP is designed so that scores are a reflection of reading comprehension ability only. For example "item difficulty is linked to test difficulty" so that once the student reaches a level of text beyond his or her understanding, the student will not be able to guess correct responses.¹¹⁸ Also, because test items are written in simplistic wording, incorrect responses can be attributed to failure to understand the text, rather than failure to understand the question.¹¹⁹ Moreover, because the test is un-timed it does not penalize slow test takers.¹²⁰ Finally, all forms of the DRP measure the same reading construct: "On the Kuder-Richardson (K-R 20) measure of internal consistency …'coefficients

¹¹⁶ Codman Academy Charter School, "CACS Accountability Plan," http://codmanacademy.org/main/files /uplink /Accountability_Plan.pdf

¹¹⁷ Mora, "An Analysis of Reading Growth over Time at Codman Academy Charter Public School: DRP Results Fall 2001 – Spring 2004," 3.

¹¹⁸ Ibid., 2. From DRP Handbook, p.2 (Touchstone Applied Science Associates Inc., 2000).

¹¹⁹ Ibid.

¹²⁰ Ibid.

range from .93 to .97'...1.0 would be perfectly reliable."¹²¹ Thus that DRP is thought to be a valid and consistent gauge of students' reading ability.

It is clear that the majority of Codman students enter the school without the ability to understand even moderately difficult text: the average DRP score for in-coming freshman is 48.025. According to the DRP Scale of Text Difficulty, this means at the start of freshman year, the average Codman student is capable of reading independently up to the difficulty level of *Sarah, Plain and Tall* by Patricia MacLachlan.¹²² This book is considered appropriate for the 3rd grade.¹²³

Each year spent at Codman, however, translates into tremendous gains for the students. While the Class of 2005 entered Codman with an average DRP score of 49, after four years at Codman, in spring of 2005, the average score had risen to 68. According to The Scale of Text Difficulty, this means that on average, these students can now read independently text of the level at which *The Scarlet Letter* (67) and *Silent Spring* (68) are written.¹²⁴ That both of these texts are used in the upper years of high school is indicative of how much the class of 2005's ability to read improved throughout their time at Codman.

As shown in Table 1, other classes at Codman are well on their way to this same growth in reading comprehension. The class of 2006's average DRP score has increased from 50 to 62.1 over three years; the Class of 2007's average DRP score has increased

¹²¹ Ibid., 3.

¹²² TASA: Degrees of Reading Power (DRP), "DRP Scale of Text Difficulty," http://www.tasaliteracy.com /drp/drp-main.html

¹²³ K12 Education for a Lifetime, "Language Arts 4," *K12 Curriculum*. http://www.k12.com /curriculum/subjects/language/language_4.html The organization ranks this book as lexile 560; 500-700 is the lexile range for 3rd grade reading material.

¹²⁴ TASA: Degrees of Reading Power (DRP), "DRP Scale of Text Difficulty."

from 47 to 58.2 over two years; and after just one year at Codman, the Class of 2008's average DRP score increased from 46.1 to 53.5.

Table 1: Average DRP Scores by Class								
	Class Average Entering Codman	Class Average Spring of Freshman Year	Class Average Spring of Sophomore Year	Class Average Spring of Junior Year	Class Average Spring of Senior Year			
Class of 2005	49	57	64	63.5	68			
Class of 2006	50	55	60	62.1	*			
Class of 2007	47	52	58.2	*	*			
Class of 2008	46.1	53.5	*	*	*			
* Indicates that the Class will take this test in a future year.								

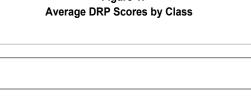


Figure 1:

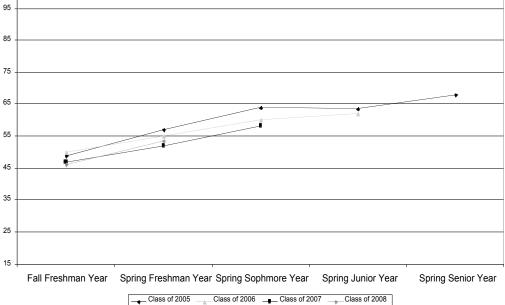


Figure 1 illustrates the upward trend in average DRP scores for each entering class. In addition, few students do not improve. Patricia Mora found that after three years at Codman 100% of the class of 2005 improved, after two years 94% of the class of 2006 improved, and after one year 80% of the class of 2007 improved.¹²⁵ Even the lowest scorers show notable growth. Mora's data show that for the class of 2001 37% of students initially tested in the 0-25% cohort, but by spring of 2004 0% did.¹²⁶ Other classes appear to be following this trend.¹²⁷

Additionally, as Table 2 shows, Codman students are gaining an average of more than four points on the DRP each year. Nationally, the average DRP growth over one school year is one to two points.¹²⁸ Thus, Codman students' reading comprehension levels are not just improving, they are improving at a rapid rate.

Table 2: Change in Average DRP Score From Previous Testing									
	Freshman Year Gain	Sophomore Year Gain	Junior Year Gain	Senior Year Gain	Total Gain	Average Yearly Gain			
Class of 2005	8	7	-0.5	4.5	19	4.75			
Class of 2006	5	5	2.1		12.1	4.03			
Class of 2007	5	6.2			11.2	5.6			
Class of 2008	7.4				7.4	7.4			

We must be cautious, however, in interpreting these outcomes as the result only of the Huntington Program. For one thing, Codman has small class sizes. Moreover,

¹²⁵ Mora, "An Analysis of Reading Growth over Time at Codman Academy Charter Public School: DRP Results Fall 2001 – Spring 2004," 6. Data on the Class of 2008 was not available.
¹²⁶ Ibid., 4.

¹²⁷ Ibid., 5. After 2 years the class of 2006 went from 32% scoring below 25% to 16% scoring below; after 1 year, the class of 2007 went from 49% scoring below 25% to 24% scoring below.
¹²⁸ Ibid., 8.

Codman students enter the school with particularly low levels of reading ability: it is easier to improve extremely low scores than it is to improve average or high scores. These caveats aside, it makes sense that the theatre-based literacy program I have described would have a positive effect on reading comprehension and vocabulary since this is what it targets.

The MCAS

The Massachusetts Comprehensive Assessment System (MCAS) is a system of tests that has been used in Massachusetts since the implementation of the Massachusetts Education Reform Law of 1993.¹²⁹ Given in certain grades in the areas of English Language Arts, Mathematics, and Science and Technology/Engineering, the tests assess how students perform with respect to the *Massachusetts Curriculum Frameworks*. The MCAS was designed to test special and general student populations and to serve as a basis for accountability; thus *all* Massachusetts students must pass both the 10th grade Math and English Language Arts MCAS Exams in order to graduate.¹³⁰ MCAS scores are reported at the school level by the designations of advanced, proficient, warning/needs improvement, and failing. Codman Academy aims for a 100% pass rate (that is not 'failing'), with at least 75% passing on the first testing administration.¹³¹

The 10th Grade English Language Arts MCAS Exam (ELA MCAS) is a valuable means through which to judge the effectiveness of the Codman/Huntington Partnership in

¹²⁹ Massachusetts Department of Education, "MCAS Overview: Frequently asked Questions," http://www.doe.mass.edu/mcas/overview_faq.html?section=all
¹³⁰ Ibid

¹³¹ Codman Academy Charter School, "CACS Accountability Plan," *http://codmanacademy.org/main/files* /uplink /Accountability_Plan.pdf

improving literacy and writing skills. The partnership is specifically designed to address numerous strands of the *Massachusetts English Language Arts Curriculum Framework*—the guidelines on which the ELA MCAS Exam is based.¹³² Within the *Framework*'s "Language and Reading" and "Literature" strands, the partnership targets the following standards: Discussion; Questioning, Listening, and Contributing; Oral Presentation; Understanding Text; Making Connections; Genre; Theme; Dramatic Literature; Dramatic Reading and Performance.¹³³ Thus, the students' ELA MCAS scores provide feedback on how well the Partnership has taught a wide range of important literacy skills.

In addition, by the time the students take the ELA MCAS Exam they have completed nearly two full years of the Huntington program. A great deal of time is spent at Codman preparing for the test and, like all other areas of English language arts, the partnership is the key tool used to teach and to ready the students. It is not surprising, then, that on the 2003 ELA MCAS Exam 85% of Codman 10th graders reported using a play they studied at the Huntington to answer the MCAS writing composition essay question and on the 2004 test 80% reported using a character from a Huntington play to answer the question.¹³⁴ Moreover, because of the high stakes attached to the ELA MCAS, teachers at Codman work explicitly with the students on the *transfer* of the comprehension and writing skills cultivated through the partnership to the domain of the

¹³² Massachusetts Department of Education, "English Language Arts," *Current Curriculum Frameworks*, http://www.doe.mass.edu/frameworks/current.html

¹³³ Emc.Arts, LLC, *Huntington Theatre Company Program Evaluation: Huntington/Codman Partnership*,
7.

 ¹³⁴ 2003: Emc.Arts, LLC, *Huntington Theatre Company Program Evaluation: Huntington/Codman Partnership*, 19; 2004: Schumacher, "Proposal to EdVestors and the Fund for Nonprofit Partnerships: Huntington-Codman Academy Charter School Partnership, 2004-2005," 6.

test. Thus, the students' scores are—to a great extent—a reflection of what they have learned through reading, doing, and analyzing theatre and dramatic texts.

Collection of Data

The Massachusetts Department of Education (MA DOE) maintains and publicizes numerous reports containing accountability information on students and schools in the Commonwealth through its Student Information Management System (SIMS).¹³⁵ Using the Department's sources, I was able to compile information on MCAS scores, student characteristics, and school characteristics to create a unique dataset for the participants of the 2003-2004 and 2004-2005 10th grade ELA testing administrations. I constructed the dataset by merging on key variables contained within larger MA DOE datasets, by hand-entering data directly from MA DOE reports where merging attempts were unsuccessful, and by creating unique variables to designate school characteristics that were not explicitly quantified in the MA DOE data reports. The resulting dataset includes the approximately 340 public high schools in the state.

Hypothesis

My hypothesis is that participation in two years of the Codman Academy/ Huntington Theatre Partnership's English Language Arts Program will have a positive effect on the scores of Codman students on the 10th grade ELA MCAS Exam. In order to

¹³⁵ Massachusetts Department of Education, "Data Collection: SIMS," http://www.doe.mass.edu /infoservices/data/sims/ "The Student Information Management System (SIMS) is a student-level data collection system that allows the Department to collect and analyze more accurate and comprehensive information, to meet federal and state reporting requirements, and to inform policy and programmatic decisions."

evaluate this hypothesis, it is necessary to determine whether the percent of Codman 10th grade students demonstrating competency (a designation of advanced or proficient) on the ELA MCAS has increased, remained stable, or decreased as a result of participation in the Partnership. Ideally, this would be accomplished through a randomized experiment in which students in Codman are placed in either a treatment group that receives English language arts through the Huntington program or a control group that receives an identical English language arts program excepting participation in the program. Unfortunately, (for the sake of experimental design, anyway) every class of Codman students since the school's inception has participated in the Huntington Program; thus there is no true comparison group available by which to judge the impact of the partnership.

Fortunately, because all 10th grade students in the Massachusetts public school system take the ELA MCAS exam, we can compare the scores of students in Codman to the scores of students in schools that did not participate in the program, and thereby measure the program's effects on reading comprehension and writing. Such an assessment, however, has limitations: because it involves nonequivalent comparison groups, perceived differences in scores may be the result of any number of differences between the two groups (such as student background characteristics, selection bias, school quality, or exposure to external programs), rather than the treatment, because the students have not been *randomly* assigned to *equivalent* groups. Thus, we must

64

isolate the effects of the Huntington Program on the student's test scores. This can be accomplished through linear regression analysis.

Using linear regression, we can generate an equation that will take into account factors other than participation in the partnership (group differences) that may affect test scores. The coefficients in the resulting equation will tell us how much each of these factors is correlated with the dependent variable (ELA test scores). We will then be able to plug the values for each school into the equation to generate a predicted score that will show us how well each school is expected to perform on the ELA MCAS based on its characteristics. Then, by comparing each school's predicted score to its actual score (this is known as the residual) we will see how much better or worse each school has performed than was expected from its demographic and organizational characteristics. Moreover, by looking at residuals we will be able to compare Codman's performance to other schools' performances—despite group differences—and thereby determine the difference made by the Partnership. This is made possible by our inclusion of student population indicators and school structural characteristics that may affect scores in the regression equation.

Independent Variables

Student Population Indicators

As discussed in previous sections of this paper, student characteristics other than 'innate' intelligence can and do affect academic outcomes. Schools that serve 'at risk' populations will therefore almost always generate low test scores—even when these

65

schools have a greater than average positive impact on the academic performance of their students—because of their students' backgrounds. In order to predict accurately the performances of students on the ELA MCAS exam, then, it is imperative to include measures of the student population characteristics known to depress test scores. This is particularly important for our analysis as Codman enrolls a much higher percent of 'at risk' students than does Massachusetts as a whole.

The following student population characteristics (measured at the school level) will thus be included in the regression equation:

1. Percent Black Enrollment

• The percent of black students enrolled in a school.

In this paper I have documented extensively that black students achieve lower test scores vis-à-vis the population as a whole. This is true for Massachusetts as well: while 65% of all 10th graders in Massachusetts scored advanced or proficient on the 2004-2005 10th grade ELA MCAS exam, just 37% of black 10th grade students reached this level of competency.¹³⁶ Although this lower performance results not from 'being black' but rather from a combination of factors which negatively affect black students more often, it is nonetheless appropriate to include percent black enrollment in the analysis. In addition, this variable also controls for socio-economic characteristics that are not

¹³⁶ Massachusetts Department of Education, "2005 MCAS Report (District) for Grade 10 Aggregate Students," http://profiles.doe.mass.edu/mcas.aspx?mode=district&year=2005&grade=10&student _code=AL&filterBy=

captured in the somewhat crude measures of socio-economic status measures typically available from the state and school districts.

2. Percent Hispanic Enrollment

• The percent of Hispanic students enrolled in a school.

Although this paper has focused on the black-white achievement gap, the low scores of Hispanic students are similarly problematic and thus must be controlled for as well. Likewise, inclusion of this variable also controls for socioeconomic characteristics that are not captured by traditional measures of socio-economic status.

3. Percent Low Income Enrollment

• The percent of a school's student population considered to be of low income status. To be designated low income, students must meet any of the following designations: the student is eligible for free or reduced price lunch, the student receives Transitional Aid to Families benefits, or the student is eligible for food stamps.¹³⁷

Poor students generally have limited access to resources, have few learning opportunities outside of school, and have parents with low levels of education, all of which contribute to depressed achievement in school. Although income status in a particular year is an imperfect measure (because blacks and Hispanics are more likely to have been poor for longer) it is the best available means through which to gauge these

¹³⁷ Massachusetts Department of Education, "About the Data," http://profiles.doe.mass.edu/help /?section=data

circumstances. The inclusion of percent black enrollment and percent Hispanic enrollment in the equation also helps to mediate this weakness.

4. Percent Limited English Proficient Enrollment

 The percent of students enrolled in a school "...whose first language is a language other than English who is unable to perform ordinary classroom work in English."¹³⁸

5. Percent Special Education Enrollment

• The percent of a school's student population with an Individualized Education Program.¹³⁹

Limited English Proficient students and Special Education students—unique subgroups—are defined by their low achievement. Since the federally mandated *No Child Left Behind* Act requires that all student populations demonstrate adequate yearly progress, no group of students is exempted from taking the ELA MCAS. Thus, it is appropriate to control for these special types of students.

School Organizational Characteristics

Just as schools with a large 'at risk' student population are likely to generate low test scores, the unique features of some schools may influence test scores. These features must be factored in when predicting achievement. In our analysis it is particularly

¹³⁸ Ibid.

¹³⁹ Ibid.

important to control for the distinctive features present at Codman-other than the partnership-that may contribute to high test scores, lest we erroneously attribute positive effects to the Huntington Program. With this is mind, the following school organizational characteristics will be included in the regression analysis:

1. Percent Highly Qualified Core Academic Teachers

The percent of full-time equivalent teachers in core academic areas who hold a ٠ valid Massachusetts Teaching License and demonstrate subject matter competency in the areas they teach."¹⁴⁰

The Codman Academy Board of Trustees prides itself on attracting exemplary faculty to the school. Thus, almost all teachers at the school hold advanced degrees in their areas of instruction.¹⁴¹ Because such teachers may generate higher than expected test scores, it is necessary to control for the percent of highly qualified teachers in a school.

2. Student/Teacher Ratio

The number of students enrolled in a school compared to the number of teachers ٠ on October 1 of that school year.¹⁴²

While research on the benefits of small class sizes is mixed, it is probable that in very small classrooms students receive a greater than average amount of one-on-one time

¹⁴⁰ Ibid.

¹⁴¹Codman Academy, "Annual Report: 2004-2005," http://codmanacademy.org/main/files/uplink/05726 Annual_Report_pdf.pdf ¹⁴² Massachusetts Department of Education, "About the Data."

with the teacher which might positively affect their test scores. Codman staff, in particular, pride themselves on the level of individual attention that they give to each student. Thus, the equation will include student/teacher ratio to measure of this type of individual attention.

3. Charter School Status

• Designates whether or not a school is a charter school.

Research on charter schools and improved student outcomes is also mixed; nevertheless students (or their parents) must show interest or initiative in order to be enrolled in a charter school. This self-selection raises the issue that the students in charter schools (our concern is with Codman in particular) may be imbued with high levels of motivation that contribute to higher than expected scores. Thus, charter school status will be included to control for selection bias.

Results

To predict student competency, I regressed the percent of students scoring advanced or proficient on the 10th grade ELA MCAS on percent black, percent Hispanic, percent low income, percent Limited English Proficient, percent Special Education, percent of teachers highly qualified in core subjects, student teacher ratio, and charter school status for all 10th grade students in each public school in Massachusetts (excepting Codman) for the 2003-2004 and the 2004-2005 school years.

70

Table 3: Regression of				-					
Grade ELA MCAS			-			-	nizationa	I	
Charac	teristics t			na 2004-2	2005 Scho		2005		
	2003-2004				2004-2005				
				Sig.				Sig.	
	Mean	b	Beta	Level	Mean	b	Beta	Level	
Dependent Variable									
% Advanced or Proficent	62.371				64.109				
Student Population Indic	ators								
% Black	10.999	-0.022	-0.017	0.727	11.116	-0.101	-0.083	0.066	
% Hispanic	9.064	-0.101	-0.061	0.278	9.588	-0.045	-0.028	0.595	
% Low Income	23.641	-0.570	-0.584	0.000	24.867	-0.529	-0.561	0.000	
% LEP	3.227	-0.291	-0.072	0.129	2.764	-0.350	-0.108	0.003	
% Special Education	15.674	-0.518	-0.268	0.000	15.841	-0.606	-0.302	0.000	
School Organizational C	haracteris	stics							
% Teachers Highly Qual.	91.426	0.141	0.070	0.036	90.568	0.129	0.074	0.044	
Student/Teacher Ratio	13.458	0.513	0.065	0.076	13.826	0.105	0.054	0.087	
Charter School	0.065	10.556	0.104	0.004	0.065	10.583	0.111	0.000	
Constant		64.598				75.567			
Ν		326				337			
C ²		~ 744				~ 7 4 ^			

Table 3 displays the results of the regression analysis. For each independent variable the mean, regression coefficient (b), standardized coefficient (Beta), and significance level are reported. The mean is the average value of a variable across all schools included in the analysis. The regression coefficient is the extent to which the dependent variable changes as a result of a one unit increase in the independent variable, holding other variables constant. The standardized regression coefficient is reported in standard units that allow for comparison to other variables. The significance level measures the probability that the effect size found could have occurred by chance. While social scientists differ in their cut-off points for statistical significance, most consider anything above the significance level of .05 as not significant.

Although we are primarily concerned with predicting over-all scores, rather than causal analysis, the equations themselves merit some discussion. The R^2 value for the 2003-2004 school year equation is 0.711. This means that together these student and school characteristics explain 71.1% of the variation in the percent of students scoring advanced or proficient on the ELA MCAS for that school year. The 2004-2005 school year equation boasts a slightly higher R^2 value of 0.742; here, then, the independent variables explain 74.2% of the variation. While neither equation fully explains student performance on the ELA MCAS (this would be an R^2 of 1.00) both equations explain more than two-thirds— a very substantial amount. Thus, we can expect our prediction scores to be highly accurate.

Interestingly, Table 3 reveals that the percent black and percent Hispanic students in a school matter very little in determining ELA MCAS scores. The coefficients for both minority groups are negative, but they are very small. Moreover, none of the coefficients reach the threshold of statistical significance (.05). This does not mean that race is not a factor in test scores; however, much of the perceived effects of race are 'explained' by income. Indeed, percent black and percent Hispanic are highly correlated with low income status. The correlation coefficient for percent black and percent low income for the 2003-2004 school year is 0.684 and for the 2004-2005 school year is 0.694. Similarly, the correlation coefficient for percent Hispanic and percent low income in the 2003-2004 school year is 0.775 and for the 2004-2005 school year is 0.773 (1.00 would mean they were perfectly correlated). And, as Table 3 illustrates, low income status is the single biggest determinate of the percent of students scoring advanced or proficient in a school for both years. It has a strong negative effect: in 2003-2004 the regression coefficient is -0.570. This means that for every 1% increase in a school's population of low income students, controlling for other variables, the percent expected to demonstrate competency on the ELA MCAS Exam falls by 0.57%. Similarly, the coefficient for 2004-2005 is -0.529, which means that for every 1% increase in low income students, controlling for other variables, the percent expected to demonstrate for 2004-2005 is -0.529, which means that for every 1% increase in low income students, controlling for other variables, the percent expected to demonstrate competency falls by 0.53%. In both equations this coefficient is highly significant at the .000 level—indicative of a real relationship.

As expected, both the percent of Limited English Proficient students and the percent of Special Education students in a school have negative effects on scores. These coefficients are relatively large and, excepting percent LEP in 2003-2004, reach the threshold of statistical significance.

Among the school organizational characteristics, we see that student/teacher ratio has a very small positive effect on scores; however the coefficient is not statistically significant in either equation. The percent of teachers highly qualified and charter school status also have positive effects on scores and, in both equations, are statistically significant. It is interesting to note that for both years the results show that charter schools, holding other variables constant, can expect to see 10.6% more of their students demonstrating competency on the 10th grade ELA MCAS Exam than non-charter schools.

73

Prediction

To predict the performance of Codman 10th graders on the ELA MCAS based on student and school characteristics, we simply substitute Codman's values on these measures into the equations in Table 3. Thus, for the 2003-2004 school year the equation is as follows:

Y = 64.598 + -0.022 (82.716) + -0.101 (12.346) + -0.570 (79.000) + -0.291 (0.000) + -0.518 (16.000) + 0.141 (94.000) + 0.513 (6.400) + 10.556 (1)

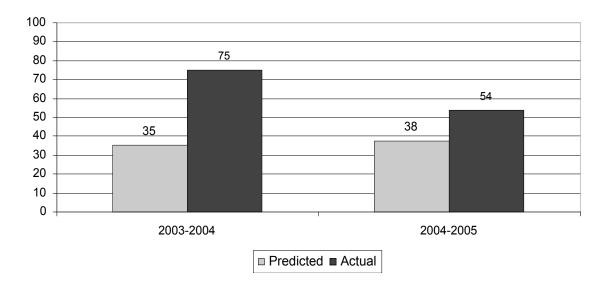
According to the above equation, 35.307% of Codman 10th graders were expected to score advanced or proficient on the 2003-2004 ELA MCAS Exam. This is a bleak picture; fortunately, reality is quite different. On the actual 2003-2004 test 75% of Codman 10th graders scored advanced or proficient. This means that the residual (the difference between the predicted and actual score) is 39.693%.

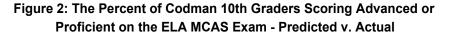
For 2004-2005 school year the equation is as follows:

Y = 75.567 + -0.101 (85.714) + -0.045 (11.429) + -0.529 (77.100) + -0.350 (0.000) + -0.606 (16.200) + 0.129 (80.000) + 0.105 (9.300) + 10.583 (1)

Here 37.672% of Codman 10th graders were expected to score advanced or proficient on the 2004-2005 ELA MCAS Exam. Again, Codman's real-life performance was better than predicted: the actual percent of Codman 10th graders scoring advanced or proficient in 2004-2005 was 53.571%. This is a residual of 15.899%.

Figure 3 illustrates the differences between Codman's predicted and actual performance for both school years. Clearly there is a disparity between the two.





Moreover, above average performances of this magnitude are highly unusual. In order to see if other schools in the Commonwealth accomplished similar feats, I computed the residuals for all of the schools used in each equation. The results are remarkable: out of the 326 schools included in the 2003-2004 regression analysis, *only one school has a larger positive residual than Codman has*. In other words, in 2003-2004 Codman outperformed 99.7% of the schools in Massachusetts. Out of the 337 schools included in the 2004-2005 analysis, 24 have larger positive residuals than Codman has; for 2004-2005, then, Codman outperformed 92.9% of schools in the state.

Of course, we must be modest regarding these findings. While the variables included in the regression equations allow us to control for many of the school's unique

features, it is nonetheless possible that I have omitted factors that might explain Codman's large residuals that are unrelated to the Huntington program. One of these is the fact that Codman students are in school for more hours per week than other students in Massachusetts. Unfortunately, data on in-school hours is not available in the MA DOE datasets so this variable could not be included in the equation. The small size of Codman itself (approximately 120 students) might also play a role in the students' better-thanexpected scores (although Charter school status probably somewhat captures school size). Finally the Codman/Huntington Program is still in its infancy. People are still energized and enthusiastic about this new program and this may wane over time.

Nevertheless, given the high R² values and Codman's large residuals it is unlikely that the students' performances can be completely explained by these factors. The fact that there is a clear theoretical link between the partnership and improved reading and writing ability and the fact that Codman's English language arts curriculum is based primarily on the plays that students read and act out at the Huntington makes it highly plausible that theatre-based literacy is responsible for Codman students' impressive performances. And, as we have seen, the activities done at the Huntington and connections forged at Codman are directly aimed at the reading comprehension and writing skills that the test assesses. Even the school's staff credits the partnership with having a positive effect on the students' MCAS scores.¹⁴³ It seems fair to assume that Codman's 'unexplained' high performance on this test reflects the students' involvement with theatre.

76

¹⁴³ Emc.Arts, LLC, *Huntington Theatre Company Program Evaluation: Huntington/Codman Partnership*, 17.

VI. Implications

From the earliest phase of the partnership, Meg Campbell intended that it "serve as a symbiotic laboratory for a national project in theatre-based literacy."¹⁴⁴ While the Partnership has clearly had a positive effect on students' verbal skills, is such replication possible? For the model to be extended to other circumstances two important requirements must be met: schools and theatre companies must be *willing* and *able* to invest the time and energy needed to create and sustain such a partnership. Thus, in the following sections we will look at the current status of theatre-in-education (to assess the desirability of such a program) as well as the specific requirements inherent to such a program (to assess replication ability).

Theatre in America's Schools

At present, the arts are not viewed as an essential component of an American education. Theatre, in particular, appears to be underserved in schools. In 1997 NAEP conducted its first comprehensive arts assessment on a national scale in more than 20 years: researchers looked at 8th grade involvement in music, visual art, dance, and drama.¹⁴⁵ While NAEP researchers had no problem finding a national sample of music and visual art participants, since only 11% of the students included in the 1997 random sample reported involvement in theatre arts, researchers were forced to use a targeted sample.¹⁴⁶ Such low student involvement in theatre is not surprising as only 26% of

¹⁴⁴ Ibid., 6.

¹⁴⁵ National Association of Educational Progress, *The NAEP 1997 Arts Report Card*, NCES 1999-486, (Washington DC: US Government Printing Office, 1999).

¹⁴⁶ Ibid. Likewise, they were unable to find a large enough sample for dance.

schools surveyed reported offering theatre courses while 91% and 83% had music and visual arts courses, respectively.¹⁴⁷ In addition, the NAEP study found that theatre courses were less likely than music or visual arts courses to be taught by certified teachers and were less likely to have set curricula and appropriate classroom space.¹⁴⁸

Other studies echo NAEP's findings. In 1991 the National Arts Education (NAE) Research Center at the University of Illinois issued its report, *The Status of Arts Education in American Public Schools*, which examined demographic data, curricular data, adequacy, and support for arts from a national sample of schools.¹⁴⁹ While the study found that 63.5% of small (>999) high-schools offered some type of theatre course, only 19.4% of these schools reported an adequate theatre/drama classroom and only 21.6% had a certified drama teacher.¹⁵⁰ The results for large high schools were only slightly better.

Theatre involvement for minorities is particularly disturbing: the NAE report found that black students are underrepresented in all types of arts courses (with the exception of vocal music) and that they are most underrepresented in drama programs.¹⁵¹ Further, the NAEP assessment found that among students involved in theatre, white students outperformed black students on all measures of dramatic ability, including Creating and Responding.¹⁵²

¹⁴⁷ Ibid.

¹⁴⁸ Ibid., Executive Report.

¹⁴⁹ Charles Leonard, *The Status of Arts Education in American Public Schools*, Urbana: Council for Research in Music Education, 1991.

¹⁵⁰ Ibid.

¹⁵¹ Ibid.

¹⁵² National Association of Educational Progress, The NAEP 1997 Arts Report Card, NAEP Facts.

It is clear that theatre does not occupy a central place in America's schools—but why? In a letter written in 2004 while visiting schools around the country, former Secretary of Education Rod Paige noted that "...arts programs are being diminished or eliminated, [in part] because [the No Child Left Behind Act] is being interpreted so narrowly..."¹⁵³ Indeed, it is likely that the recent push for accountability and high test scores, coupled with budget cuts, has caused educators to focus provincially on those areas which dictate the funding their school receives, particularly when their schools serve 'at risk' students. In this case, a diminished investment in the arts would be expected because people do not see their relevance to academic performance and test scores.

However, as the NAEP and NAE reports illustrate, music and visual arts enjoy a (relatively) prominent place in schools. In fact, the College Board Program even offers tests in Studio Art, Art History, and Music Theory among its venerable Advanced Placement (AP) tests.¹⁵⁴ Perhaps, music and visual art are viewed as more 'academic' and therefore more appropriate subjects for schools than is theatre? Or, perhaps the unique requirements of theatre (e.g. a stage, costumes) seem too great of a burden?

The Codman Academy/Huntington Theatre Partnership, however, answers both of these concerns. It presents a way to integrate theatre with academics and shows that even schools without their own theatrical resources can have drama programs—by working with a local theatre company. Further, the success of the Codman/Huntington partnership

¹⁵³American Arts Alliance, "Issue Center," http://www.americanartsalliance.org/americanartsalliance /arts_ed_issue_brief_05.html

¹⁵⁴ College Board, "Advanced Placement: Subjects," http://www.collegeboard.com/student/testing /ap/subjects.html

reveals that literacy-through-drama is an effective means through which to raise scores of low income and minority students. Despite the current low status of theatre in America's schools, then, the benefits and success of the Codman/Huntington partnership model offer an impetus for other educators to emulate this model.

What it Takes

This is not to say, however, that replication of the Codman/Huntington model is easy, or even possible for all schools. According to the staff at the Huntington:

"We believe that a formal replication of the partnership could be possible between any type of alternative school (be it a charter school, pilot school, or academy-type public school) and a major regional theatre with dedicated education staff. Certain urban areas with highly developed theatrical resources (i.e. New York City, Chicago, Atlanta, and Seattle) would be better suited for a full recreation of the model. It would be difficult for any but the very largest theatre companies to partner with more than one school at this level on an ongoing basis. The demands of curriculum development and classroom time are too high."¹⁵⁵

Indeed, the Codman/Huntington Partnership is a relationship between a small innovative charter school and a large regional theatre company. It is these particular features of both organizations that have allowed the program to flourish.

Codman is not, by any means, a large school: in the 2004-2005 school year it boasted a total of 105 students, 34 of which were 9th graders and 30 of which were 10th graders.¹⁵⁶ Given the issues of space, staff, and transportation involved in operating a partnership based on the Codman/Huntington model, a large group of students would

¹⁵⁵ Schumacher, "Proposal to EdVestors and the Fund for Nonprofit Partnerships: Huntington-Codman Academy Charter School Partnership, 2004-2005," 6.

¹⁵⁶ Massachusetts Department of Education, "Codman Academy Charter Public School – Directory Information," http://profiles.doe.mass.edu/home.asp?mode=so&so=3608-13&ot=12&o=3605&view=all

place a huge burden on limited resources. Brown also notes that the smaller the group of students involved, the easier it is to plan curriculum.¹⁵⁷

Further, as a charter school, Codman enjoys a great amount of autonomy and flexibility, which facilitates day long visits to the Huntington and the occasional rehearsal in the middle of Humanities class. Codman teachers are very open and willing to involve the partnership as part of class time. Schools with stricter formats may have difficulty in sustaining such a relationship. Likewise, this type of partnership would work best with schools that do not have rigid curriculum requirements as "[h]aving a partnership with a theater company means studying the plays that company performs in a given school year."¹⁵⁸ Ideally, then, a school that undertakes a partnership based on the Codman/Huntington model would have a limited number of students and would have the ability to be flexible in time and curriculum.

In addition, a successful partnership of this type also demands a theatre company with sufficient artistic, financial, and personnel resources. The Huntington Theatre Company is a large well-established theatre: it boasts two theatre venues, an almost endless supply of props and costumes, and some of the best artistic and production staff in the country. The Company has also forged relationships with many local artists and myriad Boston arts organizations over the years. Thus, it is able to stage a wide variety of high quality productions each year and to bring in outside artists, insuring that the students are exposed to diverse literary material and acting experiences.

¹⁵⁷ Brown, "Jumpstarting Literacy Through Immersion in Theatre: Codman Academy Charter School and the Huntington Theatre Company," 6.

¹⁵⁸ Ibid.

Moreover, tickets to shows, printing, food, artist stipends, artistic materials, and the like make this type of partnership an expensive endeavor. As a major regional theatre, the Huntington has the financial capability needed to sustain substantial outreach programs, such as its partnership with Codman. In the 2003-2004 season, for instance, the theatre's combined earned and contributed income was close to 9 million dollars.¹⁵⁹ Also, the theatre's Development Department is highly experienced in actively seeking out target grants, and often does so for the Codman/Huntington Program.

Perhaps most importantly, the Huntington Theatre has a large and committed education staff. Indeed, to replicate successfully the Codman/Huntington partnership, a theatre must be able to devote the necessary time and man- and/or woman-power to the program. Developing a literacy-based theatre curriculum is quite time consuming: Huntington teachers plan out several day-long Theatre Day sessions each month, direct multiple student performances, and secure the space and resources they need—all while working with a co-teacher at Codman. There are also constant decisions to be made about content, and location changes often happen at the last minute. Without a staff devoted specifically to the planning and execution of the program, a theatre company would likely struggle to maintain a high level of programming. Likewise, the nature of activities done at a theatre—performances, rehearsing, production work—often require the presence of more than one staff member. Without a large staff it would be very difficult to supervise the students involved.

¹⁵⁹ Schumacher, "Proposal to EdVestors and the Fund for Nonprofit Partnerships: Huntington-Codman Academy Charter School Partnership, 2004-2005," 14.

The Codman Academy/Huntington Theatre Partnership is, by all accounts, a very unique program. And, because of its unique features, not all schools and communities will have the capability to replicate the exact Codman/Huntington Model. Nevertheless, the partnership shows the value of using theatre in education and offers many examples of effective practices that can be used by teachers and educators in the absence of a full partnership. Teachers could take their classes on a field trip to a play and base an English lesson around it, for example. Or perhaps host a Shakespearean monologue competition to supplement the reading of *King Lear*. The most important lesson learned from the partnership, however, is that a theatre-based English language arts curriculum can improve the low literacy levels of low income minority students who arrive in high school still struggling to read, write, and express themselves effectively. In other words, yes: theatre can help close the achievement gap.

VII. Conclusion

We still do not know exactly what causes racial differences in achievement. Can teachers overcome the effects of student background characteristics? More research is needed to determine how drama improves literacy. Will educators be willing to implement theatre-based literacy in schools? Can the black-white achievement gap ever be totally eliminated?

Many questions and issues remain. This uncertainty, however, does not mean that we should be content to theorize and to point fingers as racial inequalities continue to divide society; instead, we should *act*.

References

- Adelman, Clifford. Answers in the Tool Box; Academic Intensity, Attendance Patterns and Bachelor's Degree Attainment. Washington DC: US Department of Education, 1999.
- American Arts Alliance. "Issue Center." http://www.americanartsalliance.org /americanartsalliance/arts_ed_issue_brief_05.html
- Armor, David J. "Black Achievement 50 Years After *Brown*." Prepublication Draft. Revised August 2004. Paper delivered at "50 Years After *Brown*, What Has Been Accomplished and What Remains to be Done." J.F. Kennedy School of Government, Harvard University, April 23-34, 2004.
- Bankston, Carl L. and Stephen J. Caldas. "Family Structure, Schoolmates, and Racial Inequalities in School Achievement." *Journal of Marriage and the Family* 60, no. 3 (August 1998): 715-723.
- Bracey, Gerald W. "Inequality from the Get Go." *Phi Delta Kappan* 84, no. 8 (April 2003): 635-636.
- Brown v. Board of Education, 347 U.S. 483 (1954).
- Brown, Thabiti Akil. "Jumpstarting Literacy through Immersion in Theater: Codman Academy Charter School and the Huntington Theatre Company." www.Codmanacademy.org/main/files /up link/Brown.html
- Codman Academy Charter School. "Annual Report: 2004-2005." http://codmanacademy.org/main/files/uplink/05726 Annual Report pdf.pdf
- -----. "CACS Accountability Plan." http://codmanacademy.org/main/files /uplink /Accountability_Plan.pdf
- Codman Academy Charter School and the Huntington Theatre Company. "The Eyes of the World are Watching Now." (Showcase script). May 2005.
- College Board. "Advanced Placement: Subjects." http://www.collegeboard.com/student /testing /ap/subjects.html
- Cooper, Eric J. and Daniel U. Levine. "A Comprehension and Cognitive Development Approach to School Reform." *The Journal of Negro Education* 62, no. 1 (Winter, 1993): 91-100.

DeYoung, Alan J. Economics and American Education: A Historical and Critical

Overview of the Impact of Economic Theories on Schooling in the United States. New York: Longman, 1989.

- Emc.Arts, LLC. Huntington Theatre Company Program Evaluation: Huntington/Codman Partnership. Project Director Richard Evans. September 2005.
- Farkas, George. "Racial Disparities and Discrimination in Education: What Do We Know, How Do We Know It, and What Do We Need to Know?" *Teachers College Record* 105, no 6. (August 2003): 1119-46
- Ferguson, Ronald. "Can Schools Narrow the Black-White Test Score Gap?" In *The Black-White Test Score Gap*. Edited by Christopher Jencks and Meredith Phillips. Washington, DC: The Brookings Institution Press, 1998: 318-374.
- -----. "Teachers' Perceptions and Expectations and the Black-White Test Score Gap." In *The Black-White Test Score Gap*. Edited by Christopher Jencks and Meredith Phillips. Washington DC: The Brookings Institution Press, 1998: 273-317.
- Glenn, Charles. *The Social and Civic Context of Education*. Revised ed. Boston: Boston University, 2004.
- Grissmer, David, Ann Flanagan, and Stephanie Williamson. "Why Did the Black-White Score Gap Narrow in the 1970s and 1980s?" In *The Black-White Test Score Gap*. Edited by Christopher Jencks and Meredith Phillips. Washington DC: The Brookings Institution Press, 1998: 182-226.
- Huntington Theatre Company. "Department of Education 2004-2005 End of Year Report." (Internal Document), 2005.
- Jackson, Yvette. "Unlocking the Potential of African American Students: Keys to Reversing Underachievement." *Theory into Practice* 44, no.3 (2004): 203-210. www.nuatc.org/articles/pdf/jackson_article.pdf
- Jencks, Christopher and Meredith Phillips. The Black-White Test Score Gap: An Introduction." In *The Black-White Test Score Gap*. Edited by Christopher Jencks and Meredith Phillips. Washington DC: The Brookings Institution Press, 1998: 1-51.
- K12 Education for a Lifetime. "Language Arts 4." *K12 Curriculum*. http://www.k12.com /curriculum/subjects/language/language_4.html
- Leonhard, Charles. *The Status of Arts Education in American Public Schools*. Urbana: Council for Research in Music Education, 1991.

Levine, Daniel U., Eric J. Cooper, and Asa Hilliard III. "National Urban Alliance

Professional Development Model for Improving Achievement in the Context of Effective School Research." *The Journal of Negro Education* 69, no. 4 (Autumn 2000): 305-322.

Massachusetts Department of Education. "2005 MCAS Report (District) for Grade 10 Aggregate Students." http://profiles.doe.mass.edu/mcas.aspx?mode=district&year =2005&grade=10&student _code=AL&filterBy=

-----. "About the Data." http://profiles.doe.mass.edu/help /?section=data

- -----. "Charter Schools Question and Answers." http://www.doe.mass.edu/charter /qanda.html
- -----. "Codman Academy Charter Public School Directory Information." http://profiles .doe.mass.edu/home.asp?mode=so&so=360813&ot=12&o=3605&view=all

-----. "Data Collection: SIMS." http://www.doe.mass.edu/infoservices/data/sims/

-----. "English Language Arts." *Current Curriculum Frameworks*. http://www.doe. mass.edu/frameworks/current.html

-----. "MCAS Overview: Frequently asked Questions." http://www.doe.mass.edu /mcas/overview_faq.html?section=all

- Mora, Patricia. "An Analysis of Reading Growth over Time at Codman Academy Charter Public School: DRP Results Fall 2001-Spring 2004." Master's thesis, Harvard, n.d.
- National Association of Educational Progress. *The NAEP 1997 Arts Report Card.* NCES 1999-486. Washington DC: US Government Printing Office, 1999.

-----. "Trends in Average Reading and Math Scale Scores by Race/Ethnicity: White-Black Gap." 2004 Long Term Trends. http://nces.ed.gov/nationsreportcard/ltt /results2004/sub-race.asp.

- National Center for Education Statistics. *The Condition of Education 2004*. NCES 2004-07. Washington DC: US Government Printing Office, 2004.
- Phillips, Meredith, Jeanne Brooks-Gunn, Greg J. Duncan, Pamela Lebanov, and Jonathan Crane. "Family Background, Parenting Practices, and the Black-White Test Score Gap." In *The Black-White Test Score Gap*. Edited by Christopher Jencks and Meredith Phillips. Washington DC: The Brookings Institution Press, 1998: 103-145.

Phillips, Meredith, James Crouse, and John Ralph, "Does the Black-White Test Score

Gap Widen after Children Enter School?" In *The Black-White Achievement Gap*. Edited by Christopher Jencks and Meredith Phillips. The Brookings Institute Press, 1998: 229-272.

- Podlozny, Ann. "Strengthening Verbal Skills Through the Use of Classroom Drama: A Clear Link." *Journal of Aesthetic Education* 34 nos. 3 4 (Fall/Winter 2000): 239-275.
- Porter, Kathleen. "The Value of a College Degree." *ERIC Digest*. Washington DC: ERIC Clearinghouse on Higher Education, 2002. http://www.ericdigests.org/2003-3/value.htm
- Rothstein, Richard. "Wising Up on the Black/White Achievement Gap." *Education Digest* 70, no. 4 (December 2004): 27-36.
- Schildkrout, Aaron. Curriculum: Expository Writing." http://codmanacademy.org/ branches/bestpractices/index.php?module=pagemaster&PAGE_user_op=view_page &PAGE_id=15&MMN_position=15:15
- Schumacher, Catherine Robe. "Proposal to EdVestors and the Fund for Nonprofit Partnerships: Huntington-Codman Academy Charter School Partnership, 2004-2005." (Grant proposal), 2004.
- TASA: Degrees of Reading Power (DRP). http://www.tasaliteracy.com/drp/drpmain.html
- United States Bureau of the Census. *Educational Attainment in the United States: 2004.* "Percent of High school and College Graduates of the Population 15 Years and Over, by Age, Sex, Race, and Hispanic Origin: 2004." http://www.census.gov/population /www/socdemo/education/cps2004.html
- -----. *Home Literacy Activities and Signs of Children's Emerging Literacy: 1993 and 1999.* Statistical Abstract of the United States, 2000. NCES 2000-026, 1999. www.census.ov/prod/2001pubs/statab/sec04.pdf
- Vaughn, Kathryn and Ellen Winner. "SAT Score of Students Who Study the Arts: What We Can and Cannot Conclude about the Association." *Journal of Aesthetic Education* 34, nos. 3 – 4 (Fall/Winter 2000): 77-89.
- Williams, Clarence and Spencer Williams. *Nobody in Town Can Bake A Sweet Jelly Roll Like Mine*. Bessie Smith, vocals. 1923 or 1924.

Wilson, August. Gem of the Ocean. Sageworks, 2003.

Winner, Ellen and Monica Cooper. "Mute Those Claims: No Evidence (Yet) for a Causal Link between Arts Study and Academic Achievement." *Journal of Aesthetic Education* 34, no. 3 – 4 (Fall/Winter 2000): 11-75.

Appendix A

- 1. Letter to Ain't Misbehavin' Cast
- 2. *A Raisin in the Sun* Character Trait Chart
- Huntington-Codman Showcase: Student Assessment
 Heartbreak House Vocabulary Quiz A

Appendix A: Letter to Ain't Misbehavin' Cast

Tuesday, October 7, 03

Dear James, Dana, Todd, Terita and Soara-Joye,

It seems like years ago that I met you at the "meet and greet" on your first day of rehearsal. So much is going on in this theatre! Your work has really brought such joy to so many people. Some of those people are yet to have seen you – the students for the student matinees. We know from speaking with teachers that the students are so excited and psyched to see AIN'T MISBEHAVIN'.

I'm writing to ask if two of you might be available to visit a school, the Codman Academy Charter School, in Dorchester this coming Friday afternoon for 40 minutes of talking about your work and then answering questions. A very informal presentation. The Codman kids will see your show on Thursday, and have also been doing some background work on the time period, Fats Waller, etc.

The Huntington has a remarkable collaboration with Codman. The school is using the Huntington's plays as the basis for their language arts curriculum. They have school here, at the Huntington, twice a month! The 10th graders recently found out that their entire class passed the Massachusetts standards test for language arts. This is amazing because schools in Boston are struggling in testing/assessment areas.

Anyway, the kids could tell you a lot more about their Huntington experiences. I would love to offer them the opportunity to learn more about you professionally.

I can offer an honorarium of \$75.00 to each of two of you; it might need to be \$60.00 if there were three of you. The Education Department would take care of cab vouchers for your travel. You could go anytime between 12:30 and 3:30 pm.

If anyone is interested, please give me a call at my extension, x1548.

Thanks so much.

Sincerely,

Donna Glick Director of Education

Appendix A: A Raisin in the Sun Character Trait Chart

		A R	aisin in the Sun Character Trait Chart
Charact	er:		Character's Age:
Charact	er's Role in Fa	mily:	×
		c	'haracter's Dreams and Aspirations:
Page #			Information/Quotations
	_		
		Char	racter Traits and Temporary Emotions:
Page #	Adjective	CT/TE	Explanation:

Appendix A: Huntington-Codman Showcase: Student Assessment

Huntington-Codman Showcase: Student Assessment A Raisin in the Sun + May 27, 2005

Student Name:	Grade:				
Student Name:					
Stage Presence (20 points) - student demonstrates ability to be heard, familiarity with each scene, effective blocking, and effective vocal control of variables such as rate, pitch, force, and tone <u>Consuments</u> :					
	out of 20				
Character Creation (20 points) student demonstrates familiarity understanding of his/her character's objective and function and th way, and effective development of a "voice" for the character(s) Comments:					
20xmm/mare-	out of 20				
Performance Choices (20 points) — student shows understanding literature being performed; demonstrates creativity in choosing go performance rhythms, and mood in presenting performance Comments:					
	out of 20				
Commitment (10 points) - student performance shows prior comm to meeting deadlines, and accepting direction Comments:	itment to being well-prepared,				
out of 10 Teamwork (10 points) - student shows ability to work well with fellow students, and to give and receive effective feedback Comments:					
7-Manuella-	out of 10				
Memorization (10 points) - student demonstrates ability to remem text as it was written	ber the dialogue and present the				
Comments:	out of 10				
Audience Skills (10 points) - student demonstrates active listening and participation in post- production discussions					
Comments:	out of 10				
	out of 100				
ACHIVEMENT LEVEL SCORING GUIDE					
0-50: Unsatisfactory 50-70: Satisfactory					
70-85: Proficient					
85-100: Exemplary					

Hearthreak House Vocabulary Quiz A

humanities codman academy charter school

Name: _____ [4 pts])

Word Bank

÷

A	В	C	D
1. inadequacy	7. permeate	13. ambiance	19. ambition
Ineffectual	unrequited	14. impending	20. woo
morality	9. idealistic	15. impetus	mysticism
profound	10. affluent	16. brink	22. capitalism
5. eccentric	11. replicate	17. systematically	23. renounce
cynicism	12. recession	18. tantamount	24. disillusionmen

Part I - In your own words, define the words from column A. [4 pts. per word]

,

1.

2.

3. 4. 5.

6.

Appendix A: Heartbreak House Vocabulary Quiz A, cont.

Heartbreak House Vocabulary Quiz A

h u m a n i t i e s codmon academy charter school

7. Ambition	a. to seek the favor or affection of
8. Woo	b. an economic system in which investment in and ownership of the means of production, distribution, and exchange of wealth is made and maintained chiefly by private individuals or
9. Mysticism	corporations
	c. to give up or put aside
10. Capitalism	d. free from belief or idealism; disenchantment
11. Renounce	e. desire for achievement and willingness to strive for it
12. Distillusionment	f. beliefs of other worldliness; spiritual beliefs outside ordinary understanding

Part II - Matching. Place the correct letter in the space next to the word. [4 pts. each]

Part III - Fill in the blanks. Remember to change the form where appropriate. [4 pts. each]

- When I ran out into the rain without my umbrella the water _____ my shirt.
- To many Americans Dr. Martin Luther King's words are thought to be quite ______; they cause many to think deeply about life in the United States.
- After the attacks on NYC and Washington DC the headlines of The Boston Globe read. "USA on the ______ of war.
- After the son was found guilty of the murders of 15 people his father realized that he could no longer support him; he ______ his son.
- Upon securing the AFC Championship trophy the Patriot's only ______ was to win the Super Bowl.
- With candles lit and soft music playing the ______ of the room was quite calm.

Part IV - Choose 6 words from columns A or D. Create a story using the new words. Make sure that, according to the context, the meaning of the word is clear. Write the story on the back of this sheet. [4 pts. per word]

Bibliography

- Adelman, Clifford. Answers in the Tool Box; Academic Intensity, Attendance Patterns and Bachelor's Degree Attainment. Washington DC: US Department of Education, 1999.
- American Arts Alliance. "Issue Center." http://www.americanartsalliance.org /americanartsalliance/arts_ed_issue_brief_05.html
- Armor, David J. "Black Achievement 50 Years After *Brown*." Prepublication Draft. Revised August 2004. Paper delivered at "50 Years After *Brown*, What Has Been Accomplished and What Remains to be Done." J.F. Kennedy School of Government, Harvard University, April 23-34, 2004.
- Bankston, Carl L. and Stephen J. Caldas. "Family Structure, Schoolmates, and Racial Inequalities in School Achievement." *Journal of Marriage and the Family* 60, no. 3 (August 1998): 715-723.
- Bourdieu, Pierre and Jean-Claude Passeron. *Reproduction in Education, Society and Culture*. Edited by Richard Nice. London: Sage Publications, 1990.
- Bracey, Gerald W. *Put to the Test: An Educator's and Consumer's Guide to Standardized Testing*. Revised ed. Bloomington: Center for Professional Development and Services, 2002.
- -----. "Inequality from the Get Go." Phi Delta Kappan 84, no. 8 (April 2003): 635-636.
- Brown v. Board of Education, 347 U.S. 483 (1954).
- Brown, Thabiti Akil. "Jumpstarting Literacy through Immersion in Theater: Codman Academy Charter School and the Huntington Theatre Company." www.Codmanacademy.org/main/files /up link/Brown.html
- Burton, Judith, Robert Horowitz, and Hal Abeles. "Learning in and Through the Arts: Curriculum Implications." In *Champions of Change: The Impact of the Arts on Learning*. Edited by Edward B. Fiske. Washington DC: Arts Education Partnership, n.d.: 35-46. http://artsedge.kennedy-center.org/champions/pdfs/ChampsReport.pdf
- Catteral, James S., Richard Chapleau, and John Iwanago. "Involvement in the Arts and Human Development: General Involvement and Intensive Involvement in Music and Theatre Arts." In *Champions of Change: The Impact of the Arts on Learning*. Edited by Edward B. Fiske. Washington DC: Arts Education Partnership, n.d.: 1-18. http://artsedge.kennedy-center.org/champions/pdfs/ChampsReport.pdf

- Catteral, James S. and Lynn Waldorf. "Chicago Arts Partnerships in Education Summary Evaluation." In *Champions of Change: The Impact of the Arts on Learning*. Edited by Edward B. Fiske. Washington DC: Arts Education Partnership, n.d.: 47-62. http://artsedge.kennedy-center.org/champions/pdfs/ChampsReport.pdf
- Codman Academy Charter School. "Annual Report: 2004-2005." http://codmanacademy.org/main/files/uplink/05726 _Annual_Report_pdf.pdf
- -----. "CACS Accountability Plan." http://codmanacademy.org/main/files /uplink /Accountability_Plan.pdf
- Codman Academy Charter School and the Huntington Theatre Company. "The Eyes of the World are Watching Now." (Showcase script). May 2005.
- College Board. "Advanced Placement: Subjects." http://www.collegeboard.com/student /testing /ap/subjects.html
- Cooper, Eric J. and Daniel U. Levine. "A Comprehension and Cognitive Development Approach to School Reform." *The Journal of Negro Education* 62, no. 1 (Winter, 1993): 91-100.
- Davis, Jessica Hoffman. "Redefining Ratso Rizzo: Learning From the Arts about Process and Reflection." *Phi Delta Kappan* 87, no. 1 (September 2005): 11-17.
- DeYoung, Alan J. Economics and American Education: A Historical and Critical Overview of the Impact of Economic Theories on Schooling in the United States. New York: Longman, 1989.
- Emc.Arts, LLC. Huntington Theatre Company Program Evaluation: Huntington/Codman Partnership. Project Director Richard Evans. September 2005.
- Farkas, George. "Racial Disparities and Discrimination in Education: What Do We Know, How Do We Know It, and What Do We Need to Know?" *Teachers College Record* 105, no 6. (August 2003): 1119-46
- Ferguson, Ronald. "Can Schools Narrow the Black-White Test Score Gap?" In *The Black-White Test Score Gap*. Edited by Christopher Jencks and Meredith Phillips. Washington, DC: The Brookings Institution Press, 1998: 318-374.
- -----. "Teachers' Perceptions and Expectations and the Black-White Test Score Gap." In *The Black-White Test Score Gap*. Edited by Christopher Jencks and Meredith Phillips. Washington DC: The Brookings Institution Press, 1998: 273-317.

Glenn, Charles. The Social and Civic Context of Education. Revised ed. Boston: Boston

University, 2004.

- Green, Jay P. PhD and Greg Forester, PhD. "The Teachability Index: Can Disadvantaged Students Learn?" Center for Civic Innovation at the Manhattan Institute. *Education Working Paper* 6 (September 2004): 1-35.
- Grissmer, David, Ann Flanagan, and Stephanie Williamson. "Why Did the Black-White Score Gap Narrow in the 1970s and 1980s?" In *The Black-White Test Score Gap*. Edited by Christopher Jencks and Meredith Phillips. Washington DC: The Brookings Institution Press, 1998: 182-226.

Hansberry, Lorraine. A Raisin in the Sun. New York: Penguin Books, Inc., 1987.

Heath, Shirley Brice and Adelma Roach. "Imaginative Actuality: Learning in the Arts During the Non-school Hours." In *Champions of Change: The Impact of the Arts on Learning*. Edited by Edward B. Fiske. Washington DC: Arts Education Partnership, n.d.: 19-34. http://artsedge.kennedy-center.org/champions/pdfs/ChampsReport.pdf

Hirsch, E.D. Jr. Cultural Literacy. New York: Random House, 1998.

- -----. *The Schools We Need and Why We Don't Have Them.* New York: Anchor Books, 1999.
- Huntington Theatre Company. "Department of Education 2004-2005 End of Year Report." (Internal Document), 2005.
- -----. "I Dwell in Possibility." (Showcase Compilation). 2004.
- Jackson, Yvette. "Unlocking the Potential of African American Students: Keys to Reversing Underachievement." *Theory into Practice* 44, no.3 (2004): 203-210. www.nuatc.org/articles/pdf/jackson_article.pdf
- Jencks, Christopher and Meredith Phillips. The Black-White Test Score Gap: An Introduction." In *The Black-White Test Score Gap*. Edited by Christopher Jencks and Meredith Phillips. Washington DC: The Brookings Institution Press, 1998: 1-51.
- K12 Education for a Lifetime. "Language Arts 4." *K12 Curriculum*. http://www.k12.com /curriculum/subjects/language/language_4.html
- Leonhard, Charles. *The Status of Arts Education in American Public Schools*. Urbana: Council for Research in Music Education, 1991.
- Levine, Daniel U., Eric J. Cooper, and Asa Hilliard III. "National Urban Alliance Professional Development Model for Improving Achievement in the Context of

Effective School Research." *The Journal of Negro Education* 69, no. 4 (Autumn 2000): 305-322.

Massachusetts Department of Education. "2005 MCAS Report (District) for Grade 10 Aggregate Students." http://profiles.doe.mass.edu/mcas.aspx?mode=district&year =2005&grade=10&student _code=AL&filterBy=

-----. "About the Data." http://profiles.doe.mass.edu/help /?section=data

- -----. "Charter Schools Question and Answers." http://www.doe.mass.edu/charter /qanda.html
- -----. "Codman Academy Charter Public School Directory Information." http://profiles .doe.mass.edu/home.asp?mode=so&so=360813&ot=12&o=3605&view=all
- -----. "Data Collection: SIMS." http://www.doe.mass.edu/infoservices/data/sims/
- -----. "English Language Arts." *Current Curriculum Frameworks*. http://www.doe. mass.edu/frameworks/current.html
- -----. "MCAS Overview: Frequently asked Questions." http://www.doe.mass.edu /mcas/overview_faq.html?section=all
- Mathis, William J. "Bridging the Achievement Gap: A Bridge Too Far?" *Phi Delta Kappan* 86, no. 8 (April 2005): 590-593.
- McNamee, Stephen J. and Robert K. Miller, Jr. *The Meritocracy Myth.* Lanham: Rowan & Littlefield Publishers, Inc., 2004.
- Mora, Patricia. "An Analysis of Reading Growth over Time at Codman Academy Charter Public School: DRP Results Fall 2001-Spring 2004." Master's thesis, Harvard, n.d.
- National Association of Educational Progress. *The NAEP 1997 Arts Report Card*. NCES 1999-486. Washington DC: US Government Printing Office, 1999.
- -----. *NAEP 2004 Trends in Academic Progress: Three Decades of Student Performance*. NCES 2005-464. Washington DC: US Government Printing Office, 2005.
- -----. "Trends in Average Reading and Math Scale Scores by Race/Ethnicity: White-Black Gap." 2004 Long Term Trends. http://nces.ed.gov/nationsreportcard/ltt /results2004/sub-race.asp.

National Center for Education Statistics. The Condition of Education 2004. NCES 2004-

07. Washington DC: US Government Printing Office, 2004.

- Nisbett, Richard E. "Race, Genetics, and IQ." In *The Black-White Test Score Gap*. Edited by Christopher Jencks and Meredith Phillips. Washington DC: The Brookings Institution Press, 1998: 86-102.
- Oberman, Ida and Kiley Walsh Symonds. "What Matters Most in Closing the Achievement Gap." *Leadership* 34, no. 3 (January-February 2005).
- Oddleifson, Eric. "What Do We Want Our Schools to Do?" *Phi Delta Kappan* (February 1994): 446-453.
- Oreck, Barry, Susan Baum, and Heather McCartney. "Artistic Talent Development for Urban Youth: The Promise and the Challenge." In *Champions of Change: The Impact of the Arts on Learning*. Edited by Edward B. Fiske. Washington DC: Arts Education Partnership, n.d.: 63-78. http://artsedge.kennedycenter.org/champions/pdfs /ChampsReport.pdf
- O'Sullivan, Elizabethann, Gary R. Rassel, and Maureen Berner. *Research Methods for Public Administrators*. Fourth ed. New York: Addison Wesley Longman, Inc., 2002.
- Phillips, Meredith, Jeanne Brooks-Gunn, Greg J. Duncan, Pamela Lebanov, and Jonathan Crane. "Family Background, Parenting Practices, and the Black-White Test Score Gap." In *The Black-White Test Score Gap*. Edited by Christopher Jencks and Meredith Phillips. Washington DC: The Brookings Institution Press, 1998: 103-145.
- Phillips, Meredith, James Crouse, and John Ralph, "Does the Black-White Test Score Gap Widen after Children Enter School?" In *The Black-White Achievement Gap*. Edited by Christopher Jencks and Meredith Phillips. The Brookings Institute Press, 1998: 229-272.
- Podlozny, Ann. "Strengthening Verbal Skills Through the Use of Classroom Drama: A Clear Link." *Journal of Aesthetic Education* 34 nos. 3 4 (Fall/Winter 2000): 239-275.
- Porter, Kathleen. "The Value of a College Degree." *ERIC Digest*. Washington DC: ERIC Clearinghouse on Higher Education, 2002. http://www.ericdigests.org/2003-3/value.htm
- Ramirez, Al and Dick Carpenter. "Challenging Assumptions about the Achievement Gap." *Phi Delta Kappan* 86, no. 8 (April 2005): 599-603.
- Rothstein, Richard. "Wising Up on the Black/White Achievement Gap." *Education Digest* 70, no. 4 (December 2004): 27-36.

- Schildkrout, Aaron. Curriculum: Expository Writing." http://codmanacademy.org/ branches/bestpractices/index.php?module=pagemaster&PAGE_user_op=view_page &PAGE_id=15&MMN_position=15:15
- Schumacher, Catherine Robe. "Proposal to EdVestors and the Fund for Nonprofit Partnerships: Huntington-Codman Academy Charter School Partnership, 2004-2005." (Grant proposal), 2004.
- Seidel, Steve. "'Stand and Unfold Yourself': A Monograph on the Shakespeare & Company Research Study." In *Champions of Change: The Impact of the Arts on Learning*. Edited by Edward B. Fiske. Washington DC: Arts Education Partnership, n.d.: 79-90. http://artsedge.kennedycenter.org/champions/pdfs/ChampsReport.pdf
- Singham, Mano. "The Achievement Gap: Myths and Reality." *Phi Delta Kappan* 84, no. 8 (April 2003): 586-591.
- Smilansky, Sara. The Effects of Sociodramatic Play on Disadvantaged Preschool Children. New York: John Wiley & Sons, Inc., 1968.
- Steiner, David M. "Aesthetics Between Philosophy and Pedagogy." Journal of Education 184, no. 1. Edited by Richard Silberman. Boston University. (2003): 39-56.
- TASA: Degrees of Reading Power (DRP). http://www.tasaliteracy.com/drp/drpmain.html
- United States Bureau of the Census. *Educational Attainment in the United States: 2004.* "Percent of High school and College Graduates of the Population 15 Years and Over, by Age, Sex, Race, and Hispanic Origin: 2004." http://www.census.gov/population /www/socdemo/education/cps2004.html
- -----. *Home Literacy Activities and Signs of Children's Emerging Literacy: 1993 and 1999.* Statistical Abstract of the United States, 2000. NCES 2000-026, 1999. www.census.ov/prod/2001pubs/statab/sec04.pdf
- Vaughn, Kathryn and Ellen Winner. "SAT Score of Students Who Study the Arts: What We Can and Cannot Conclude about the Association." *Journal of Aesthetic Education* 34, nos. 3 – 4 (Fall/Winter 2000): 77-89.
- Williams, Clarence and Spencer Williams. *Nobody in Town Can Bake A Sweet Jelly Roll Like Mine*. Bessie Smith, vocals. 1923 or 1924.
- Willie, Charles V. "The Contextual Effects of Socioeconomic Status on Student Achievement Test Scores by Race." *Urban Education* 36, no. 4 (September 2001):

461-478.

Wilson, August. Gem of the Ocean. Sageworks, 2003.

- Winner, Ellen and Monica Cooper. "Mute Those Claims: No Evidence (Yet) for a Causal Link between Arts Study and Academic Achievement." *Journal of Aesthetic Education* 34, no. 3 4 (Fall/Winter 2000): 11-75.
- Winner, Ellen and Lois Hetland. "The Arts in Education: Evaluation the Evidence for a Causal Link." *Journal of Aesthetic Education* 34, no. 3 4 (Fall/Winter 2000): 3-7.
- Wolf, Dennie Palmer. "Why the Arts Matter in Education or Just What Do Children Learn When They Create an Opera." In *Champions of Change: The Impact of the Arts on Learning*. Edited by Edward B. Fiske. Washington DC: Arts Education Partnership, n.d.: 91-98. http://artsedge.kennedycenter.org/champions/pdfs /ChampsReport.pdf