# English Learners in Boston Public Schools: Enrollment, Engagement and Academic Outcomes, AY2003-AY2006 FINAL REPORT 

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This Report is part of English Learners in Boston Public Schools in the Aftermath of Policy Change: Enrollment and Educational Outcomes, AY2003-AY2006, a project of the Mauricio Gaston Institute for Latino Community Development and Public Policy in collaboration with the Center for Collaborative Education, Boston.

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## Preface

It is with great anticipation and high expectations for policy changes aimed at eliminating achievement disparities that I introduce English Learners in Boston Public Schools in the Aftermath of Policy Change. This report is the fruits of a multisectorial collaboration led by the University of Massachusetts-Boston's Mauricio Gastón Institute for Latino Community Development and Public Policy that includes the Center for Collaborative Education, other sister institutes at UMASS-Boston, local foundations and community organizations. Consistent with the mission of the Gastón Institute, the main objective of this report is to inform local and state policy makers, educators and advocates, as well as the families and the communities of the children affected by English learning policies.

This report is based on a study of the academic experience of Boston English Learners (ELs) after 2002, when the Transitional Bilingual Education (TBE) was replaced with Sheltered English Immersion (SEI) in response to the passing of Question 2. ELs represent about $14.5 \%$ of the student population in the Boston school district, the largest and more diverse school district in Massachusetts. The research team documented the impact of the policy change on the academic experience of ELs using existing local statistics, public records and staff accounts obtained through interviews. Salient results for both students and their teachers are disheartening and highlight the urgency for rigorous monitoring of student outcomes, teacher competencies and transparency of results. This report also calls for local policy makers to make a solid commitment to teacher training that focuses on evidencebased instructional practices and positive outcomes.

This report is released in the wake of statistics showing that English Learners are the fastest-growing segment of the K-12 student population in the United States, and that their educational outcomes are the biggest failure of the No Child Left Behind policies. Results from this study resemble those from other schools districts in California. Addressing the needs of English Learners is a critical element of improving schools' capacity to eliminate achievement disparities. This is clearly acknowledged in the Obama-Biden Education Agenda with the commitment to increase accountability of school for the educational success of students in transitional bilingual education and other supportive structures for students with limited proficiency in English.

We, at the Gastón Institute, look forward to seeing the same commitment by the Readiness Project, the central piece of the Massachusetts' education policy agenda, in alignment with new federal efforts to eliminate existing disparities. We believe that the experience of Boston points to the need for a state wide assessment of the effects of the policy created after the passing of Question 2, and a state wide comparison of outcomes of different types of instructional models for ELs. Indeed, we are willing and ready to help create a system to monitor progress in the educational achievement of English learners.

Maria Idalí Torres, MSPH, PhD.
Director
Mauricio Gastón Institute for Latino Community Development and Public Policy

## Acknowledgements

We wish to thank, first of all, Nydia Méndez and Chris Coxon of the Boston Public Schools for their support of this research. Their initiative made it possible for the Boston Public Schools to release the data that forms the basis of this research. Superintendent Carol Johnson and Barbara Adams, BPS' Chief Academic Officer, have been most supportive of our work, opening the door for staff interviews and discussing findings throughout the process of analysis. Although this report does not represent "good news" for the Boston Public Schools, the collaboration between the researchers and the leadership of the district has been excellent and very helpful in gaining a common understanding of the implications of these findings. We thank them for their openness and for their support. Staff members of the Massachusetts Department of Elementary and Secondary Education and the Boston Public Schools participated in our study through interviews; their perspective filled the gaps left by the quantitative data, and we thank them for their insights.

We thank most especially The Barr Foundation, The Schott Foundation for Education, and The Boston Foundation for the funding to conduct this research; their support made this work possible. We thank also the William Monroe Trotter Institute for the Study of Black Culture and the Institute for Asian American Studies, both at UMass Boston, for their financial support, which made possible the early stages of this project, as well as for their ongoing support.

The research itself relied on a wonderful group of researchers and graduate students. We thank Rosann Tung, Director of Research at the the Center for Collaborative Education in Boston, who led the work of cleaning and analyzing the quantitative data supplied by the Boston Public Schools. Her experience in handling this specific type of administrative data was invaluable. We thank Peter Kiang of the Graduate College of Education at UMass Boston for his overall guidance and support and most particularly for his early work on the project and for his work in the community-based dissemination. Lusa Lo (also of the Graduate College of Education at UMass Boston), Tatjana Meschede (now at Brandeis University's Heller School), Nicole Lavan (PhD Candidate in Public Policy at the McCormack Graduate School), Virginia Diez (a doctoral student at the Tufts University's ElliotPearson Department of Child Development) and Monique Ouimette (of the Center for Collaborative Education) scoured the literature, conducted interviews, prepared the data for analysis and produced the initial analyses; we thank them.

The two reports in this publication owe a great debt to the work of Nicole Agusti and Faye Karp, both PhD students in the Public Policy PhD Program at the McCormack Graduate School in UMass Boston and research assistants at the Gastón Institute; they produced the analyses and obsessively checked the data. Finally, thanks go also to María Torres and Miguel Colón for transcribing interviews.
The release of the findings began with presentations at the Civil Rights Project / Projecto de Derechos Civiles at UCLA and the University of California's Language Minority Research Institute in April and May 2008. We thank Patricia Gándara and Gary Orfield for their invitation to participate in the discussions on the impact of restrictive language policies on the education of language minority students, and we thank the many colleagues who provided feedback on our work as part of that process. Closer to home, we are grateful to Jorge Capetillo-Ponce, Ramón Borges-Méndez, Billie Gastic, Tom Hidalgo, Dan French, María Idalí Torres, Peter Kiang and Elizabeth Pauley for feedback on the work emanating from this study, including its final report. Thanks to Jim 0'Brien for editing the manuscripts and Meena Mehta for her design work in this publication.

Members of organizations in the Cape Verdean, Chinese, Haitian, Latino, and Vietnamese communities who have attended two rounds of presentations on the outcomes of students from these groups have provided invaluable feedback and affirmation; we list then in the inside back cover of this report and thank them very much. John Mudd and Samuel Hurtado from the Massachusetts Advocacy Center (MAC), Jane López from the Multicultural Education Training and Advocacy (META), and Myriam Ortiz from Boston Parents Organizing Network (BPON) have provided feedback and support throughout. We thank them all and hope that our small contribution to their strong and continuous work on behalf of Boston's school children will bear fruit.

But we cannot end our acknowledgements without thanking Diana Castañeda (Boston College Graduate School of Social Work) and, most especially, Melissa Colón, Associate Director of the Gastón Institute, for their work in organizing the dissemination of this research to policy makers and to the public, and for making sure that the work of researchers reaches parents in a way that will make a difference to the education of their children.

## Explanation of Terms

|  | Models |
| :--- | :--- |
| $\begin{array}{l}\text { Sheltered English } \\ \text { Immersion (SEI) }\end{array}$ | $\begin{array}{l}\text { Model for teaching English Learners which relies on the use of simple English } \\ \text { in the classroom to impart academic content, using students' native languages } \\ \text { only to assist students in completing tasks or to answer a question. }\end{array}$ |
| $\begin{array}{l}\text { Transitional Bilingual } \\ \text { Education (TBE) }\end{array}$ | $\begin{array}{l}\text { Model for teaching English Learners that relies on the student's own language } \\ \text { as a bridge to the acquisition of English as a second language. }\end{array}$ |
| Study Populations |  |$]$

Varied terms are used to refer to students whose verbal, reading, and/or writing skills in English are limited, who cannot do classroom work in English, and who are placed in language acquisition and support programs in American schools. Often the terms "English Learners" ("ELs"), "English Language Learners" ("ELLs"), and "students of limited English proficiency" ("LEPs") are used interchangeably. In this report, we use the term "students of limited English proficiency," or "LEPs," to refer to those students whose first language is not English and who are unable to perform ordinary classroom work in English. This is the definition used by Massachusetts Department of Elementary and Secondary Education, (MDOE, 2004.) LEPs can be enrolled in General Education programs as well as in special language acquisition and support programs. We use "English Learners," or "ELs," to refer to those students who are enrolled in a program of English language acquisition or support. We do not use the term "English Language Learners" in this report but the term is interchangeable with "English Learners," but not with "LEPs."


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## EXECUTIVE SUMMARY

In 2002, Massachusetts voters approved a referendum against the continuance of Transitional Bilingual Education (TBE) as a method of instruction for English language learners. The study undertaken by the Mauricio Gaston Institute at UMass Boston in collaboration with the Center for Collaborative Education in Boston finds that, in the three years following the implementation of Question 2 in the Boston Public Schools, the identification of students of limited English proficiency declined as did the enrollment in programs for English; the enrollment of English Learners in substantially separate Special Education programs more than doubled; and service options for English Learners narrowed. The study found that high school drop-out rates among students in programs for English Learners almost doubled and that the proportion of English Learners in middle school who dropped out more than tripled in those three years. Finally, although there have been some gains for English Learners in both ELA and math MCAS pass rates in 4th and 8th grade, gains for English Learners have not matched those of other groups and as a result gaps between English Learners and other BPS populations have widened.

The policy change: Referendum Question 2 became law as Chapter 386 of the Acts of 2002 in December and was implemented across the state in the Fall of 2003. It replaced a wideranging set of bilingual programs with Sheltered English Immersion (SEI) programs, whose main purpose is to expedite the learning of the English language. Unlike TBE, which relies on English Learners' own language to facilitate the learning of academic content as they master English, the SEI model is based on the concept that the English language is acquired quickly when taught through meaningful content and effective interaction. SEI programs rely on the use of simple English in the classroom to impart academic content, using students' native languages only to assist students in completing tasks or to answer a question. The law has the goal that English Learners (ELs) be placed in SEI programs for no longer than one year and then transition into mainstream classrooms. Parents can seek to "waive" the placement of their children in SEI programs and request to have their children placed in General Education or in bilingual education programs.

The implementation of Question 2 has varied substantially across the state (DeJong, Gort \& Cobb, 2005; Rennie Center, 2007), but there is still scant information about its impact on the outcomes for ELs in the state. In 2007, the Mauricio Gastón Institute at UMass Boston in collaboration with the Center for Collaborative Education in Boston began a study with the purpose of assessing the changes brought about by the new policy and the impact on the engagement and academic outcomes of students of limited English proficiency. The study focused on Boston Public Schools during the last year (AY2003) of TBE and the first three years (AY2004, 2005, and 2006) of implementation of SEI.

Method: The study used an administrative database provided by the Boston Public Schools (BPS) which includes demographic and enrollment information from the Student Information Management System (SIMS) on each BPS student enrolled in AY2003, AY2004, AY2005, and AY2006. Using a unique identifier for each student, results from the Massachusetts Comprehensive Assessment System (MCAS) have been merged with the SIMS, thus allowing for the analysis of academic outcomes. Researchers also collected and analyzed documentary data pertinent to the implementation of Question 2 and interviewed personnel of the Massachusetts Department of Elementary and Secondary Education (MDESE) and the Boston Public Schools to understand the context of the implementation of the policy.

## 1. Who are Boston's English Learners?

The terms English Learners, English Language Learners, and students of limited English proficiency and their acronyms (ELs, ELLs, and LEPs) are often used interchangeably. The Massachusetts Department of Elementary and Secondary Education (MDESE) defines students of limited English proficiency as students "who are native speakers of languages other than English and who are not able to perform school work in English" (MDOE, 2004). Starting from this definition, Figure 1 presents BPS enrollment in AY2006 using native language and English proficiency as the prisms through which BPS' populations are examined. "Native language" is the first divider (green row); out of the 59,211 students in BPS in AY2006, 34,790 (68.8\%) are native English speakers (NES) and 24,421 (31.2\%) are native speakers of other languages (NSOLs). NSOLs are speakers of many of the world's languages, but the largest language groups are Spanish, Haitian Creole, and Chinese (several dialects), Cape Verdean Creole and Vietnamese.

Figure 1. School Populations Defined by Language. Boston Public Schools. AY2006
$\left.\begin{array}{|l|l|l|l|}\hline \text { Total } & \text { All BPS }(59,211) & & \\ \hline \text { Native Language } & \text { NES }(34,790) & \text { NSOL }(24,421) & \\ \hline \begin{array}{l}\text { Language } \\ \text { Proficiency }\end{array} & \text { EP }(34,790)^{1} & \text { EP }(14,695) & \text { LEP }(9,726) \\ \hline \begin{array}{l}\text { Program } \\ \text { Participation }\end{array} & \text { In General Education }(34,790) & \begin{array}{l}\text { In General Education } \\ (14,695)\end{array} & \text { In Gen Ed }{ }^{2}\end{array} \begin{array}{l}\text { In EL } \\ \text { Programs } \\ (8,614)\end{array}\right]$

Note. (1) A small number of students who are Native English Speakers were also identified as LEPs. (2) LEP students in General Education are students who have opted out of programs for English Learners or who have transitioned to General Education but still retain their LEP designation; they amount to 1,112 students.

NSOLs are divided into those who are proficient in English (EPS) and those who are of limited English proficiency (LEPs) (blue row). The majority of NSOLs in Boston Public Schools (60.2\%) are proficient in English, although they speak it as a second language. English proficient NSOLs have been determined to be capable of doing schoolwork in English and may have entered BPS as English speakers or may be students who have transitioned from bilingual education. Students of limited English proficiency (LEPs) are NSOLs who have been determined not capable of regular classroom work in English; in AY2006, 39.8\% of all NSOLs fit this criterion.

By the MDESE definition, all LEPs are eligible for programs for English Learners, whether they are specific programs—such as Two-Way bilingual programs or Sheltered English Immersion programs-or ESL and other language support services for those students transitioning into General Education programs. In Boston in AY2006, 88.6\% of LEPs were enrolled in specific programs for English Learners (rust cell) and $11.4 \%(1,112)$ were enrolled in General Education programs. Students in specific programs for English Learners accounted for $14.5 \%$ of BPS enrollment.

The study presents the trends in enrollment and in academic outcomes for each of these groups covering the last year of TBE (AY2003) and the first three years of the implementation of SEI (AY2004-AY2006) in the Boston Public Schools.

## 2. How did the demographic characteristics of English Learners change as a result of the implementation of SEI in Boston?

A review of the demographic characteristics of NSOLs, LEPs, and LEPs in programs for English Learners and in General Education programs revealed minimal changes in gender distribution and the proportion of students from poverty backgrounds. ${ }^{1}$ There were slight changes in the racial distribution of all groups, which showed a decline in the proportion of white students, an increase of Black students, and a stable presence of Asians and Latino students from AY2003to AY2006.

## 3. How did enrollment in programs for English Learners change?

Important findings in the study of English Learners in Boston include the decline in enrollments in EL programs, the reduction in available services for EL students, and the increase in enrollments of ELs in Special Education programs as the implementation of SEI unfolded. In that period both the identification of students of limited English proficiency and the enrollment in programs for English Learners declined (Figure 2). Findings include the following:

- The number of students identified as of limited English proficiency (LEP) declined $33.9 \%$ between AY2003 and AY2006. This decrease took place in the context of much smaller declines in overall and NSOL enrollment (less than $10 \%$ ).
- The proportion of students identified as LEP among BPS and NSOL students also declined: from $23.1 \%$ to $16.4 \%$ among the overall BPS population and from 54.2 to $38.8 \%$ among NSOLs. LEPs increased as a proportion of the elementary school enrollments, but decreased among both middle school and high school students.
- The decline in the identification of LEP students appears to be due to under-identification of students of limited English proficiency at the district's Family Resource Centers, which mis-assessed the language ability of students because of the type of testing conducted. Parents were also a source of mis-identification by withholding information on native language and home language use in order to avoid having their children designated as LEPs and placed in SEI programs. This lack of accurate reporting is a by-product of lack of parental orientation as to their rights under the law to request a waiver of SEI instruction.

Figure 2. Rate of Change in Enrollment. Selected Sub-Populations. Boston Public Schools, AY2003-AY2006


- Enrollment of LEPs in programs for English Learners fell by $42.8 \%$ in the first two years after the implementation of Question 2 and improved in the last year of observation. By AY2006, the decline in EL enrollments, at $10.9 \%$, was still higher than that of NSOLs and of the overall BPS enrollment.
- Enrollment declines were due to (1) the district's decision to transition to General Education $45.2 \%$ (or 4,366 ) of the students in TBE at the start of the implementation in the Fall of 2003; (2) the continued mis-assessment and mis-assignment of LEP students; (3) the placement in General Education of a sizeable number of students whose parents "opted out" of SEI programs for their children and the district did not provide alternative programs as required by law; in AY2006, 1,112 students were LEPs in General Education programs who received minimal, if any, language support services.

A final aspect of the changes in enrollment which followed the transition to SEI was the increase in the enrollment of LEPs in Special Education programs (Table 2). The proportion of LEP students in EL programs who participate in Special Education programs has increased at a greater rate than for other populations: from $6.5 \%$ to $9.0 \%$ in the case of full or partial inclusion SPED programs and from $4.7 \%$ to $11.0 \%$ in the case of substantially separate SPED programs.

Table 1. Participation in Special Education Programs. Selected Sub-Populations. Boston Public Schools, AY2003-AY2006

|  | AY2003 | AY2004 | AY2005 | AY2006 |
| :---: | :---: | :---: | :---: | :---: |
| All BPS |  |  |  |  |
| Full or Partial Inclusion | 10.5\% | 9.8\% | 10.4\% | 10.4\% |
| Substantially Separate | 7.9\% | 8.6\% | 8.7\% | 8.8\% |
| NES |  |  |  |  |
| Full or Partial Inclusion | 12.4\% | 11.3\% | 11.9\% | 11.8\% |
| Substantially Separate | 9.7\% | 10.2\% | 10.2\% | 10.2\% |
| NSOL |  |  |  |  |
| Full or Partial Inclusion | 8.0\% | 7.7\% | 8.3\% | 8.5\% |
| Substantially Separate | 5.4\% | 6.3\% | 6.6\% | 6.7\% |
| NSOL EPs |  |  |  |  |
| Full or Partial Inclusion | 7.6\% | 7.8\% | 8.1\% | 8.0\% |
| Substantially Separate | 3.5\% | 3.8\% | 4.1\% | 4.2\% |
| NSOL LEPs |  |  |  |  |
| Full or Partial Inclusion | 8.3\% | 7.5\% | 8.6\% | 9.1\% |
| Substantially Separate | 7.0\% | 10.3\% | 11.6\% | 10.4\% |
| LEPs in General Education |  |  |  |  |
| Full or Partial Inclusion | 11.3\% | 11.3\% | 10.8\% | 10.7\% |
| Substantially Separate | 8.4\% | 8.8\% | 8.9\% | 8.4\% |
| LEPs in Programs for ELs |  |  |  |  |
| Full or Partial Inclusion | 6.6\% | 5.8\% | 6.2\% | 9.2\% |
| Substantially Separate | 4.8\% | 6.7\% | 6.8\% | 10.9\% |

## 4. How have the characteristics of the programs for English Learners changed as BPS made the transition from TBE to SEI?

Changes in the characteristics of the programs offered to English Learners in Boston and elsewhere in Massachusetts are, first of all, a by-product of the change in policy that mandated the transition from TBE to SEI. The critical change is in the role of a student's native language in instruction. While TBE relies on the English Learners' native language to facilitate the learning of academic subjects as they master English, SEI relies uses students' native language only to assist students in completing tasks or to answer a question. This change had implications for the way instruction took place in the classroom, for the types of materials and books allowed in instruction, for the content imparted; for the teaching skills required, and for the organization of programs. This study did not focus on the intricacies of the execution of SEI in the classroom, but it did look at some of the changes in the organization of programs and the results of the process of implementation. The key findings were the following:

- After the implementation of Question 2 in September 2003, an increasing proportion of students were enrolled in SEI programs, from 86.8\% in AY2004 to 95.4\% in AY2006. The greatest concentration takes place in high school, where $97 \%$ of students are in an SEI program.
- Between AY2004 and AY2006, the number of students of limited English proficiency whose parents "opted out" of their participation in EL programs grew from 431 in AY2004 to 1,112 in AY2006. Students who "opted out" enrolled in General Education programs.

Figure 3. Enrollment in Programs for ELs. Boston Public Schools, AY2004-AY2006


- This process of "opting out" appears to be conflated with the process of parental waivers allowed under Massachusetts law. Under Question 2, parents can waive their children's participation in SEI without losing their rights to language support services, as happens in the "opt out" process.
- The district has not been proactive in using the waiver provisions allowed by the law to develop a wider array of program options for LEP students. As a result, the number and the type of services available to Boston's English Learners have declined.


## 5. What are the engagement and academic performance outcomes of students in programs for English Learners and how have these changed since the implementation of Question 2?

In examining the engagement and academic performance of English Learners, a comparison of outcomes for LEP students (both in General Education programs and in programs for ELs) with the outcomes of other groups across the four years is presented.

## Engagement

In regard to engagement, we analyze the performance of ELs in key engagement indicators such as attendance, out-of-school suspensions, and grade level retention as well as the drop out rate.

Attendance. Students in EL programs showed the highest attendance rates of all groups across the four years. Attendance rates were highest among elementary EL students and lowest among those in high school. The rate of attendance among all ELs declined slightly in the four-year period, as the attendance rates increased or remained stable among other groups.

Out-of-School Suspension. Students in EL programs have lower out-of school suspensions than all other groups. Suspension rates have tended to decrease among all groups, but the decline has been less pronounced among students in EL programs than among the other groups considered here. LEPs in middle school have higher rates of suspension than LEPs in elementary school or high school. Although students in EL programs outperform others in this indicator, the weaker decline of the rate in this group indicates some effect of the implementation of SEI, particularly among middle school students.

Grade Retention. The rate of grade retention has tended to be higher in the two LEP groups than in the English proficient groups, showing that there is wide difference in the practice of retention that affects the groups differently. Grade retention is highest among high school students. Retention in this group increased from $17.2 \%$ to $26.4 \%$ from AY2004 to AY2006. Grade retention increased among students in EL programs while it decreased or remained relatively stable among others. At the end of the period of observation, LEPs in EL programs showed the highest rate of retention of all groups.

Table 2. Outcomes on Engagement Indicators. Selected Sub-Populations. Boston Public Schools. AY2003-AY2006

|  | AY2003 | AY2004 | AY2005 | AY2006 |
| :---: | :---: | :---: | :---: | :---: |
| Attendance |  |  |  |  |
| All BPS | 95.2\% | 95.0\% | 95.0\% | 95.0\% |
| NES | 94.4\% | 94.4\% | 94.4\% | 94.4\% |
| NSOL | 96.1\% | 96.1\% | 95.6\% | 95.5\% |
| LEP in General Education | 95.5\% | 95.0\% | 95.6\% | 95.6\% |
| LEP in EL Programs | 96.1\% | 96.1\% | 95.9\% | 95.6\% |
| Out-of-School Suspension |  |  |  |  |
| All BPS | 7.6\% | 7.1\% | 6.7\% | 6.6\% |
| NES | 9.6\% | 8.7\% | 7.9\% | 7.8\% |
| NSOL | 5.7\% | 5.7\% | 5.7\% | 5.9\% |
| LEP in General Education | 5.2\% | 4.5\% | 4.1\% | 3.9\% |
| LEP in EL Programs | 3.7\% | 3.5\% | 3.4\% | 3.5\% |
| Grade Retention |  |  |  |  |
| All BPS |  | 8.4\% | 8.6\% | 8.9\% |
| NES |  | 8.7\% | 8.8\% | 8.9\% |
| NSOL |  | 6.2\% | 6.4\% | 6.4\% |
| LEP in General Education |  | 12.2\% | 13.3\% | 7.6\% |
| LEP in EL Programs |  | 12.1\% | 13.0\% | 13.7\% |
| Middle School Drop-Out Rate ${ }^{2}$ |  |  |  |  |
| All BPS | 1.1\% | 0.4\% | 4.0\% | 2.6\% |
| NES | 1.3\% | 0.4\% | 4.2\% | 2.6\% |
| NSOL | 0.9\% | 0.4\% | 3.5\% | 2.6\% |
| LEP in General Education | 2.3\% | 0.0\% | 3.9\% | 3.7\% |
| LEP in EL Programs | 0.8\% | 0.3\% | 2.7\% | 2.7\% |
| High School Drop-Out Rate ${ }^{3}$ |  |  |  |  |
| All BPS | 7.7\% | 5.3\% | 8.2\% | 10.9\% |
| NES | 8.7\% | 5.9\% | 9.0\% | 11.7\% |
| NSOL | 6.5\% | 4.6\% | 7.2\% | 9.8\% |
| LEP in General Education | 3.5\% | 0.8\% | 13.7\% | 11.9\% |
| LEP in EL Programs | 6.3\% | 6.1\% | 9.1\% | 12.1\% |

Middle School Annual Drop-Out Rate. Native English speakers showed the highest middle school drop-out rates in all but AY2006, when LEPs in EL programs showed the highest rates. LEPs in EL programs had minimal rates during the TBE year of AY2003, the lowest of all groups. LEPs in EL programs showed the highest rate increase of all groups in the four years of observation. The magnitude of the increase compared to that of others may indicate that the implementation of SEI worsened the drop-out rate among these middle school students.

High School Annual Drop-Out Rate. Among high school students, both groups of LEPs showed the lowest drop-out rates in AY2003, while under TBE. But beginning in AY2004, this pattern is reversed. At the end of the period of observation, LEPs in EL programs showed the highest rates of all groups, followed closely by LEPs in General Education. Although the high school drop-out rate of all groups increased, the increases in the rates of both LEP groups was most pronounced, signaling that there are other factors that affect LEP groups and disproportionately contributed to these increases. The dimension of the increase in the
drop-out rate of LEP students, whether in EL or General Education programs, appears to be a salient effect of the transition to SEI in Boston.

## Achievement

Improvement in the academic achievement of students of limited English proficiency was one of the promises of the sponsors of SEI programs in Massachusetts. This study of Boston's English Learners shows that the outcomes in this regard are equivocal at best.

Table 3. Outcomes on Achievement Indicators. Selected Sub-Populations. Boston Public Schools, AY2003-AY2006

|  | AY2003 |  |  |  |  |  |  | AY2004 | AY2005 | AY2006 |
| :--- | :--- | :--- | :--- | :--- | :--- | :---: | :---: | :---: | :---: | :---: |
|  | Grade 4 ELA MCAS Pass Rates ${ }^{4}$ |  |  |  |  |  |  |  |  |  |
| All BPS | $73.3 \%$ | $77.5 \%$ | $74.1 \%$ | $73.2 \%$ |  |  |  |  |  |  |
| NES | $75.1 \%$ | $78.1 \%$ | $74.6 \%$ | $72.0 \%$ |  |  |  |  |  |  |
| NSOL | $85.6 \%$ | $86.6 \%$ | $82.9 \%$ | $86.3 \%$ |  |  |  |  |  |  |
| LEP in General Education | $17.9 \%$ | $29.2 \%$ | $34.0 \%$ | - |  |  |  |  |  |  |
| LEP in Programs for ELs |  | $55.1 \%$ | $57.1 \%$ | - | 56.9 |  |  |  |  |  |


| Grade 4 Math MCAS Pass Rates ${ }^{5}$ |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| All BPS |  | $63.2 \%$ | $70.1 \%$ | $68.5 \%$ | $73.7 \%$ |
| NES |  | $62.3 \%$ | $68.6 \%$ | $66.5 \%$ | $71.2 \%$ |
| NSOL | $74.2 \%$ | $80.5 \%$ | $79.3 \%$ | $84.4 \%$ |  |
| LEP in General Education |  | $29.9 \%$ | $37.1 \%$ | $38.7 \%$ | - |
| LEP in Programs for ELs |  | $56.7 \%$ | $57.6 \%$ | - | $63.0 \%$ |
|  | Grade 8 Math MCAS Pass Rates ${ }^{6}$ |  |  |  |  |
| All BPS |  | $48.1 \%$ | $54.0 \%$ | $51.6 \%$ | $53.4 \%$ |
| NES | $44.7 \%$ | $50.6 \%$ | $52.7 \%$ | $51.9 \%$ |  |
| NSOL | $62.2 \%$ | $66.2 \%$ | $56.9 \%$ | $63.6 \%$ |  |
| LEP in General Education |  | $16.4 \%$ | $17.8 \%$ | $7.6 \%$ | - |
| LEP in Programs for ELs |  | $33.1 \%$ | $31.7 \%$ | - | $33.3 \%$ |


|  | Grade 10 ELA MCAS Pass Rates $^{7}$ |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :---: |
| All BPS | $65.5 \%$ | $65.9 \%$ | $67.8 \%$ | $77.4 \%$ |  |
| NES | $62.4 \%$ | $73.9 \%$ | $74.2 \%$ | $83.4 \%$ |  |
| NSOL | $73.9 \%$ | $79.4 \%$ | $77.9 \%$ | $88.4 \%$ |  |
| LEP in General Education | $72.8 \%$ | $38.2 \%$ | $37.9 \%$ | - |  |
| LEP in Programs for ELs | $45.1 \%$ | $26.3 \%$ | $34.7 \%$ | $43.2 \%$ |  |


|  | Grade 10 Math MCAS Pass Rates |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  | ² |  |  |  |
| All BPS | $66.8 \%$ | $68.7 \%$ | $61.1 \%$ | $67.9 \%$ |
| NES | $72.1 \%$ | $68.5 \%$ | $59.9 \%$ | $69.3 \%$ |
| NSOL | $64.1 \%$ | $75.2 \%$ | $71.1 \%$ | $76.1 \%$ |
| LEP in General Education | $72.0 \%$ | $55.0 \%$ | $31.9 \%$ | - |
| LEP in Programs for ELs | $69.5 \%$ | $63.4 \%$ | $46.9 \%$ | $45.4 \%$ |

- LEPs in EL programs have made improvements in their fourth grade ELA and Math pass rates in the four years of observation. Nevertheless, pass rates in both areas among students in EL programs are low and substantial gaps remain when comparing LEPs in EL programs to groups that are proficient in English.
- Eighth grade Math pass rates were lower for LEPs in EL programs than for NES students and English proficient NSOL students. Between AY2003 and AY2006, pass rates in Math increased among most groups of eighth graders, but the improvements were stronger among those who are English proficient when compared to those in EL programs. Significant gaps remain between the pass rates of LEPs in EL programs and those of English proficient groups.
- LEPs in EL programs did not make improvements in their tenth grade pass rates, even as pass rates climbed for English proficient students across most years. Both in ELA and Math, but particularly in Math, LEPs in EL programs lost ground in the four years examined here. This decline has tended to enlarge the gaps between the groups. By AY2006, LEPs in EL programs trailed all groups in both Math and ELA pass rates.


## Selected Recommendations to the Boston Public Schools

Recommendations regarding the environment for English Learners in the district

- Develop thorough in-service training, professional development, and the hiring of new staff with high level of knowledge and expertise in order to build an institutional culture that is well informed about the best, most recent information about the process of learning for ELs and about the requirements for the implementation of SEI.
- Develop, codify, and share with the public the district's vision for the education of newcomers. A new and different message about the importance of educating English Learners appropriately must emerge from the top leadership of the district.


## Recommendations regarding the assessment and identification of students of limited English proficiency

- Under strong OLLSS leadership, implement consistent and accurate language proficiency testing, offer evidence-based EL programs, and support accountability measures in line with the district's vision.
- Improve substantially the effectiveness of the district's identification and assessment of students of limited English proficiency for literacy in their native language and English proficiency in listening, speaking, reading, and writing.
o Family Resource Centers, Language Assessment Centers, and Newcomer Centers, as the first points of contact with families whose home languages are not English, should have bilingual staff trained on the legal and policy issues related to English Learners and capable of conveying to families their rights to bilingual education, LEP designation, information about waiving and opting out, and choice of programs.
o Rectify the assessment procedures for English Learners so that they are appropriately and accurately evaluated for literacy in their native language,
for their English proficiency, and for their ability to carry out classroom work in English by conducting the full gamut of testing: English listening, speaking, reading, and writing.
- Develop a consistent way to define, identify, and code students who are LEP so that the databases are accurate and usable for research, evaluation and program planning.
- Inform parents through multiple avenues-such as the BPS website, the Family Resource Centers, the Newcomer Center, community-based organizations, and schools-about existing program options, waivers, and opting out, so that they do not feel the need to withhold information about their children's language ability and use from the system in order to have their children not participate in SEI.


## Recommendations regarding the participation of LEP students in EL and

 General Education programs"Choice" for English Learners means access to an appropriate set of programs, suited to their English language proficiency and their native language proficiency. These choices may run the gamut from English immersion to native language literacy programs, with many options in between.

- Increase the menu of options for LEP students to include programs for students who use the waiver provision.
o Educate central office staff, intake staff, school leaders, teachers, parents, and the public at large about waivers, what they accomplish, and students' rights to waivers. Provide families with the opportunity to "waive" out of SEI and into other language programs.
o Cease encouraging families to "opt out," which leaves students without access to English Learner services and programs.
o With a vision of equity and excellence, and the goal of bringing the best programs to the students BPS serves, develop alternative, evidence-based EL programs, particularly for groups of students clustered by language.
- Develop clear criteria and processes for English Learners to transition from designation as LEP to no longer LEP (English proficient).
- Provide language support, testing, and monitoring to all students of limited English proficiency regardless of the program in which they are enrolled.


## Recommendations regarding the engagement and academic achievement of English Learners

- Review the implementation of Boston's SEI programs at the school and district levels, assessing the resources necessary, the outcomes achieved, and the needs for guidance and for support in relation to the implementation of SEI instruction.
- Review the practice of grade retention among LEP students in EL programs. High rates of grade retention are correlated with high drop-out rates. Because LEPs showed disproportionately high levels of grade retention compared with other groups (as demonstrated by the divergent rates), BPS should examine closely this practice in relation to LEP students.
- Assess the capacity of and provide support to middle school and high schools to mount state-of-the-art dropout prevention programs that: identify risk factors in the early grades, support the development of strategies school by school, and eliminate key risk factors before students enter high school.
- Offer evidence-based programs for ELs, document their implementation, improve the quality and consistency of classroom pedagogy and curriculum, and support appropriate accountability measures for these EL programs.
- Offer and mandate teacher training and qualification on SEI sheltered content instruction and ESL in the 20 hours of professional development which is part of the contract with the Boston Teachers' Union.


## Conclusions and Recommendations Regarding State Policy and Practice

Data from the Massachusetts Department of Elementary and Secondary Education suggest that statewide outcomes for LEP students have also worsened in the time period covered by this study. For example, the drop-out rate among LEP students increased from 6.1\% in AY2003 to $9.5 \%$ in AY2006. While MCAS pass rates in fourth grade ELA and Math have improved, outcomes for eighth and tenth graders have declined and, overall, gaps between ELs and others have not narrowed (MDOE, 2003-2006, 2005, n.d.-a, n.d.-b). Although the declines in the state outcomes have not been as salient as those found in this study of ELs in Boston, the downward trend in the education of this growing group of students must be addressed.

First of all, it is important that State of Massachusetts undertake a study leading to a better understanding of the status and the trends in the education of English Learners in Massachusetts, particularly after the sweeping change in policy and practice that Question 2 represented. Both California and Arizona, the two other states faced with the referendummandated implementation of restrictive language policies in their public schools, have conducted comprehensive studies of the policy's impact on student outcomes (Arizona Department of Education, 2004; Parrish et al., 2006; Wright \& Pu, 2005). There has been no comparable examination in Massachusetts. Although this study examines the impact of the implementation of Question 2 on the state's most populous district and the one with the densest population of students of limited English proficiency, it is limited in its capacity to offer generalizations about ELs across the state. The Massachusetts Department of Elementary and Secondary Education has access to data which would allow such a study.
If the research findings about EL outcomes at the state level are as consistently negative as those documented for Boston students in this study, the state has the responsibility to either radically improve the implementation of SEI or change state policy in regards to the education of English Learners. Although voters forced this change, it was up to policy makers and state government to execute the voters' mandate in a way that mitigated harm to students. This study found that the distance between policy and implementation was quite large in Boston, both because of the district's own limitations and because of the state's "hands off" approach to the implementation of the policy. Regardless of the opinion one holds about the relative value of different models of instruction, what is clear-and highlighted in this report-is the difficulty of implementing such a rapid and highly disruptive policy change in an urban district already burdened with very complex problems. Neither the legislature nor the DESE took into account the time and resources necessaryparticularly the requirements related to the professional development of teachers. In Boston, both teachers and students have paid a high price for that oversight.

Nevertheless, in the five years since the implementation of SEI, there has been ample time to accumulate and share best practices, and to assess and expedite professional development for teachers. There has also been time to assess the differential approaches to parental waivers by districts and the resulting expansion or contraction of programmatic offerings for ELs. We do not assume that all children learn through the same instructional methods, and we should not make that assumption about English Learners. Again, regardless of one's opinion about the policy itself, every effort must be made to improve the experience of schooling of English Learners in Massachusetts under SEI.

If the outcomes of English Learners continue to lag behind the improvements of other student populations and achievement gaps continue to widen, as is the case in Boston, then it has come time to assess critically the current policy. Such a assessment would need to address the relative value of immersion (SEI) and transitional additive approaches (TBE, Two-Way bilingual programs) as models of instruction. The study just presented could not make conclusions about these questions because of the lack of comparative data for the TBE period prior to Question 2 and the small number of students in Two-Way programs. At the state level, such a study is possible and the relevant data is available. An understanding of SEI implementation, approaches to waivers, program options, and enrollment trends of English Learners across the state would provide information about how best to serve these students. In addition, research in other states, with and without restrictive language policies, points to several promising program options for English Learners.

Finally, if the state finds that SEI is an inferior model of instruction, then the state must work to change the restrictive language policy, expand the evidence-based programmatic options for English Learners, and ensure that teachers are prepared to deliver those options effectively.

# English Learners in Boston Public Schools: Enrollment, Engagement and Academic Outcomes, AY2003-AY2006 <br> final report 

## Introduction

The city of Boston has long harbored newcomers, and Boston's citizens reflect the many groups who have transited this port of entry. The streets and neighborhoods of Boston recall the early entrants from Great Britain, Scotland, and Ireland, from the southern European nations of Italy, Portugal, and Greece, and from Canada and Cape Verde. Their efforts to weave themselves into Boston's social fabric have framed the city's history of the 18th, 19th, and early 20th centuries and marked the start of institutions such as the first immigrant mutual aid societies, settlement houses, and the schools for immigrant students. In many ways, Boston developed socially and economically as it met the challenges of making physical, economic, and social space for these groups and succeeded in integrating their energies and hopes to the task of building the future of the city.

The waves of newcomers of the mid and late 20th Century are no different in their hopes and potential and neither is the challenge facing Boston to integrate them. But, at times, the task appears complex for several reasons.

First, newcomers are growing in numbers and in diversity. In 2000, $25 \%$ of the city's population was born outside of the United States; this was the largest representation of foreign-born since the 1920s and an increase of $32 \%$ from 1990 (Lima, Toponarski, \& Blake, 2008). But unlike the early 20th Century flows to the city, today Ireland is the only European nation which appears in the top ten countries of origin of the immigrant population of the city—and it accounts for only 3.3\% of Boston's foreign-born. According to the Boston Redevelopment Authority (Lima, Toponarski, \& Blake, 2008), much larger proportions of Boston's immigrants come from Haiti, the Dominican Republic, China, Vietnam, El Salvador, Jamaica, and Cape Verde. Boston's newcomers speak most of the world's languages; about a third of the city's population speaks a language other than English in their home (Lima, Toponarski, \& Blake, 2008) and native speakers of languages other than English may not be immigrants at all, as is the case of the Puerto Ricans. Spanish is by far the most frequent language other than English spoken in Boston, followed by Haitian Creole, Chinese, Vietnamese, Cape Verdean Creole, and Portuguese.

Second, because the structure of the economy of the city represents a challenge to newcomers: it is not as forgiving of the limitations of education and skills as it has been in the
past. Boston's economy favors professional and technical occupations in service areas such as health, education, and finance. These occupations require high levels of education and skill. Gone are the manufacturing jobs that greeted earlier immigrants and offered ladders of opportunity for those without college degrees. Thirty-eight percent of Boston's newcomers over 25 years of age have either low levels of education or a language barrier (Lima, Toponarski, \& Blake, 2008). Boston newcomers labor mostly in very low-wage sectors of the city's economy. Therefore, only about $27 \%$ of Boston's newcomers have achieved a middle class status, in spite of high levels of workforce participation.

## 1. First Transitional Bilingual Education Law in the U.S.

Massachusetts recognized early on that language acquisition and success in education were critical to the integration of its growing newcomer population, especially its children. In February 1971, the Massachusetts General Court, concluding that instruction "given only in English is often inadequate for the education of children whose native tongue is another language," passed the first state law mandating the implementation of Transitional Bilingual Education programs in its schools (Commonwealth of Massachusetts, 1971). ${ }^{9}$ Chapter 71A mandated the identification of students with limited English proficiency (LEP) in every school district in the state and the implementation of Transitional Bilingual Education (TBE) programs when there were more than 20 LEP students who were native speakers of any one language other than English. The law specified that these were to be full-time programs offering (1) all the courses required by law both in English and in the students' native language; (2) reading and writing instruction in the native language together with oral comprehension, speaking, reading, and writing of English; and (3) instruction in the history, culture, and geography of both the United States and the country of origin of the student. It encouraged integration with English speaking students in non-mandatory courses and in-school activities and allowed parents of students who were determined to need TBE to opt out of these programs by providing a written notice to the school or the district. The law set out the criteria to be used by the Board of Education in granting certificates to TBE teachers. And finally, it provided state funds to cover those costs of implementation which exceeded the average per-pupil expenditure of the district (Commonwealth of Massachusetts, 1971).

In response to Chapter 71A, Massachusetts districts developed a wide array of programs ranging from programs which emphasized the use of the native language to those which minimized it. As the demography of the school population changed, the number of languages in which these programs were offered grew. Throughout the state, programs were offered in Spanish, several Chinese dialects, Haitian Creole, Portuguese, Vietnamese, Cape Verdean Creole, Russian, and Greek among others. For thirty years, this was Massachusetts' framework for the implementation of educational programs for children needing language support in their schooling.

## 2. Referendum Question 2 and the Advent of Restrictive Language Policies in Massachusetts Public Schools

In November 2002, Massachusetts voters approved a referendum against the continuance of TBE as a method of instruction for English Learners. The referendum in Massachusetts was part of the U.S. English Only movement that spearheaded successful ballot referendum initiatives in several states under the slogan "English for the children." The first—Proposition 227
in California-was adopted in 1998, followed by Proposition 203 in Arizona in 2000. The 2002 Massachusetts version, Question 2 (often called the Unz Initiative, named after Ron Unz, the California businessman who spearheaded and financed the initiative), was passed overwhelmingly ( $68 \%$ ) by voters.

Researchers suggest that the approval of this referendum reflected the re-emergence of negative attitudes toward immigrants due to the large increase in the immigrant population in the state. Capetillo-Ponce and Kramer (2006) place this as the background for the strengthening of the "nativist" movement exemplified by the Unz and other English Only initiatives across the U.S. which sought to restrict the use of languages other than English in instruction. Using data from polls conducted on the day of the vote as well as subsequent focus-group discussions with voters, Capetillo-Ponce and Kramer show that there was a general lack of information among voters about bilingual education, its implementation in Massachusetts, and the implications of the proposed changes. They argue that, in the absence of this type of objective information, "what posed as referendum on bilingual education may have been a referendum on other socio-political and/or economic aspects of Massachusetts society" (Capetillo-Ponce \& Kramer, 2006, p. 3). Looming large among these was the tradeoff that toleration of "high levels of immigration (would be allowed) only as long as ... the newcomers pay their own way, don't get special breaks (such as bilingual education), and assimilate at a relatively rapid rate" (p. 17).
But also important in the Massachusetts vote was the fact that there had been no reliable assessment of the quality of the Transitional Bilingual Education programs in the state. In their review of 30 years of TBE in Massachusetts, DeJong, Gort, and Cobb (2005), identify several studies of classroom and school level practices, but no comprehensive assessment of the effectiveness of TBE or its practice in Massachusetts. There was no comprehensive assessment of the progress in English language acquisition on the part of EL students in spite of the fact that districts reported this information to the Massachusetts Department of Education (now Massachusetts Department of Elementary and Secondary Education, MDESE ${ }^{10}$ ) on a yearly basis (DeJong, Gort, and Cobb, 2005, pp. 597-598). It was not until the 1998 implementation of the Massachusetts Comprehensive Assessment System (MCAS) that the academic achievement of ELs in Massachusetts was known. DeJong, Gort, and Cobb (2006, p. 598) report that in the year prior to the implementation of Question 2 (AY2003) the best performance for ELs statewide was in third grade reading, where $70 \%$ passed the test and the worst performance was in eighth grade Math, where the pass rate was only $30 \%$.

Referendum Question 2 became law as Chapter 386 of the Acts of 2002 in December and was implemented across the state in the Fall of 2003, replacing a wide-ranging set of bilingual programs with Sheltered English Immersion (SEI) programs, whose main purpose is to expedite the learning of the English language. Unlike TBE, which relies on the English Learners' own language to facilitate the learning of academic subjects as they master English, the SEI model is based on the concept that the English language is acquired quickly when taught through meaningful content and effective interaction. SEI programs rely on the use of simple English in the classroom to impart academic content, using students' native languages only to assist students in completing tasks or to answer a question. The law has the goal that English Learners (ELs) be in SEI programs for no longer than one year and then transition into mainstream classrooms. Parents can seek to "waive" the placement of their children in SEI programs and request to have their children placed in General Education or in bilingual education programs.

## 3. A Lack of Information about the Impact of Question 2 on English Learners

In the 2003 academic year (AY2003), the year Question 2 was approved by Massachusetts voters, 141,408 students enrolled in Massachusetts public schools were native speakers of a language other than English, representing $14.4 \%$ of all Massachusetts public school enrollments (MDOE, 2003c). Of these, 51,622 students were designated as of limited English proficiency (LEP), $5.2 \%$ of all enrollments. There is some evidence that models of implementation have varied substantially across the state (DeJong, Gort, \& Cobb, 2005; Rennie Center, 2007), but despite the scope of the policy change and the number of children affected, five years after SEI began to be implemented in Massachusetts, there is scant information about its impact on the outcomes for ELs in the state.

The same is true for Boston, which has the largest share (29\%) of Massachusetts public school children requiring English language support in their schooling. In the Boston Public Schools (BPS), a system with an AY2003 enrollment of $63,777,23.1 \%$ were children of limited English proficiency. The experience and outcomes of LEPs in Boston following the implementation of the policies mandated by Question 2 are yet to be understood. The first public information was presented by BPS at a meeting of the Boston City Council in May 2006, detailing the placement and outcomes of students in the year following the implementation of the policy change (Boston Public Schools, 2006). This report reflected a decline in enrollments in programs for ELs and a high drop-out rate among students who had been mainstreamed at the start of the implementation. The Citizens' Commission on Academic Success of Boston Children (2006) described the situation of ELs in Boston and reported on the declining standardized test scores for ELs. Most recently, a report by the Parthenon Group (2007) found that one of the groups most susceptible to dropping out is the lateentrant English Learner, that is, those who enter BPS for the first time during high school. But, there has otherwise been no systematic analysis of the status of students of limited English proficiency in the BPS since the passage of Question 2.

### 3.1. The Community's Demand for More Information about English Learners

Because of the absence of information, immigrant communities and education advocates in Boston have demanded greater transparency in BPS data and decision-making, particularly in relation to the status of EL students in the system. When Question 2 first passed and many students in TBE were mainstreamed, the community experienced confusion and uncertainty about the meaning of the policy change for students. A second area of concern was the increasing number of students who were dropping out and appearing in communitybased literacy and adult basic education programs. Education advocates pressured BPS for information on the status of English language learners. In April of 2006, BPS staff began a collaboration with the Gastón Institute at UMass Boston so that a full study of the outcomes of English language learners could be undertaken.

## 4. The Study of the Engagement and Academic Performance of English Learners in Boston Public Schools, AY2003-2006

This is a comprehensive research report of the study on the engagement and academic performance of students of limited English proficiency and English Learners in Boston Public Schools from AY2003 to AY2006. The study uses administrative, interview, and documentary data to assess the changes brought about by the implementation of the programs required by Question 2 and their impact on the academic outcomes of students of limited English
proficiency in Boston Public Schools during the last year of TBE (AY2003) and the three subsequent years (AY2004, AY2005, and AY2006) which mark the early implementation of SEI. The study seeks to answer the following questions:

1. How have the characteristics of the programs for English Learners changed as BPS made the transition from TBE to SEI (AY2003 to AY2006)? What issues arose in the process of implementation that affected program offerings for ELs?
2. How have the demographic characteristics of students participating in programs for English Learners changed in this time period?
3. What are the engagement and academic performance outcomes of students in EL programs and how have these changed in this time period? How do their outcomes compare to those of other BPS sub-populations?

To address these questions, we draw from several sources of data. The quantitative data used to describe the BPS language sub-populations, to determine their program participation and to assess their academic outcomes is a four-year, student-level administrative database provided by the Boston Public Schools (BPS). It includes demographic and enrollment information from the Student Information Management System (SIMS) on each BPS student enrolled in AY2003, AY2004, AY2005, and AY2006. Using a unique identifier for each student, results from the Massachusetts Comprehensive Assessment System (MCAS) data have been merged with the SIMS, thus allowing for the analysis of academic outcomes.

Researchers also collected and analyzed documentary data pertinent to the implementation of Question 2 and interviewed personnel of the Massachusetts Department of Elementary and Secondary Education and the Boston Public Schools to understand the context of the implementation of the new policy. Interviews focused on the identification and assessment of students of limited English proficiency, the enrollment in programs for ELs, the guidance received by the district and the schools regarding the implementation of SEI, and teacher training. For a full discussion of the research methods used, see Appendix 1.

### 4.1 Defining the Population of English Learners in Boston Public Schools.

In analyzing the experience of English Learners in BPS, this study uses "language" as the demarcation of the different sub-populations of BPS students. The AY2006 count of students from different sub-populations as seen from this perspective appears in Figure 1. The first row represents the totality of BPS enrollments, 59,211 students. Of these, 34,790 (58.8\%) are native English speakers (NES) and 24,421 (41.2\%) are native speakers of a language other than English (NSOL), represented in the green row.

The blue row presents the enrollment of BPS students by English language proficiency and includes students who are proficient in English (EPs) and those who possess limited proficiency in English (LEPs). The Department of Elementary and Secondary Education defines students of limited English proficiency as students whose first language is not English and who are unable to perform ordinary classroom work in English. Of the 24,421 students whose native language is not English (NSOL), 9,726 (39.8\%) are students of limited English proficiency. The majority of NSOL students (60.2\%) have been determined to be proficient in English, although they speak it as a second language, and capable of doing school work in English. LEP students are often referred to as English Learners (ELs), or as English Language Learners (ELLs). In this study we follow the convention of the MDESE and refer to them as students of limited English proficiency or LEPs.

Figure 1. Enrollment Defined by Native Language, English Language Proficiency, and Selected Program Participation. Boston Public Schools, AY2006

| Total | All BPS (59,211) | NSOL $(24,421)$ |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Native Language | NES $(34,790)$ | EP $(14,695)$ | LEP $(9,726)$ |  |
| Language <br> Proficiency | EP $(34,790)^{1}$ | In General Education $(34,790)$ | In General Education <br> $(14,695)$ | In Gen Ed ${ }^{2}$ | | In EL |
| :--- |
| Programs <br> Program <br> Participation |

Notes. (1) A small number of students who are native English speakers were also identified as LEPs. (2) LEP students in General Education are students who have opted out of programs for English Learners or who have transitioned to General Education but still retain their LEP designation; they amount to 1,112 students.

The last row represents the program participation of BPS students, in this instance focused on whether students attend a program for English Learners or a General Education program in BPS. Of the 9,726 students who are LEPs, $88.6 \%$ (or 8,614 ) are enrolled in programs for ELs. They account for $14.5 \%$ of the total enrollment of BPS. In this report, these students are referred to as English Learners or ELs. The five top language groups among Boston students in EL programs are Spanish, Chinese, Haitian Creole, Vietnamese, and Cape Verdean Creole; the second report in this publication focuses on the outcomes of native speakers from each of these groups in EL programs and those in General Education.

There are a group of LEP students ( 1,112 in AY2006) whose parents "opted out" of their enrollment in EL programs even though these students have been determined as not able to do class work in English. Interviewers in this study indicated that students listed in the BPS data as "opt outs" attend General Education programs and therefore we represent them in that way in the figure and place them in General Education in our analysis. ${ }^{11}$

### 4.2 The Organization of this Report

This report begins with a discussion of what is known about three relevant issues: (1) the processes of educating immigrant children and children whose first language is not English; (2) the different program models in bilingual education and, specifically, the practice of SEI and its results; and (3) because this research focuses on the early years following the implementation of the new policy demanded by the passage of Referendum Question 2, we also focus on a discussion of the experience of implementation of similar policies in California and Arizona and their results. This conceptual discussion is followed by an exposition of the process of implementation exhibited in Massachusetts and in Boston following the passage of Question 2. Drawn primarily from documentary and interview data, it serves as a backdrop for the analysis of the quantitative findings.

Figure 2. Populations Defined by Language Used in the Analyses of Outcomes

| Total | All BPS |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Native Language | NES | NSOL | LEP |  |
| Language <br> Proficiency | EP | In General Education | In Gen Ed | In EL <br> Programs |
| Program <br> Participation | In General Education | NES in General Education | NSOL in General <br> Education | LEP in <br> Gen Ed |
| All Program <br> Participation |  |  |  | LEP in EL <br> Programs |

The quantitative presentation is next, and it focuses on four sets of comparisons. The first compares the academic outcomes of the sub-populations defined by native language (NES and NSOL, green row). The second compares the same outcome indicators along the populations defined by language proficiency (EP and LEP within the NSOL, blue row). The third analyzes the outcomes of LEPs participating in programs for ELs and those in General Education programs (tan and rust cells). Finally, the fourth comparison seeks to answer the question: How do the outcomes of students in EL programs compare to those of other BPS sub-populations? The outcomes of LEPs in programs for ELs (rust) will be compared with those of (a) LEPs in General Education (tan), (b) NSOL students who are proficient in English (EP) and attend General Education programs (dark blue), and (c) native English speakers who are enrolled in General Education programs (light green).

We end the report with a summary of the findings, conclusions, and recommendations.

## Background

Question 2 entailed major changes in perspective and in practice in Massachusetts. For one, the premise of Question 2 that children learn a second language best by immersion represented a radical conceptual change from the underpinnings of Transitional Bilingual Education (TBE), which valued and used the child's first language in the acquisition of the second. Immersion and transition, along with the "maintenance" model, represent the contours of the debate on language acquisition and provide an important conceptual underpinning for this study. Similarly, understanding the practice of SEI is necessary to assess its implementation in Massachusetts and in Boston as well as its implementation in the two other states whose voters mandated more restrictive language policies. The experiences of California since it began to implement these policies in 1998 and of Arizona, at work in this direction since 2000, are presented here.

## 1. Educating English Learners

English Learners are a concern in the U.S. because, as their numbers grow, their academic performance (as measured by standardized reading, writing, and math tests) and their school engagement variables continue to lag behind those of native English speakers. In the years since the 2001 reauthorization of the federal Elementary and Secondary Education Act (ESEA), known by its popular name No Child Left Behind, we have entered a new era of assessment and accountability. All students, regardless of their English proficiency, are required to take standardized tests, and their performance affects their schools' Annual Yearly Progress (AYP). As a result, the underperformance of English Learners has become the responsibility of all teachers and school administrators, not just the staff in charge of bringing English Learners to par with their native speaking counterparts. In a way, this increased visibility of English Learners' performance as an indicator of school success is welcome news.

However, in the face of standardization, instructional flexibility has suffered. Some argue that the passage of NCLB alone had the net effect of ending bilingual education as it had existed, for example, in New York City (Menken, 2008). Embedded in the new standards appears to be an assumption that the acquisition of English as a second language could be accelerated if only teachers and students were to try a little harder. This expectation is unrealistic. Educating children with limited English proficiency takes time. While conversational English-the kind that students use with their peers-can be acquired with one or two years of exposure, reaching grade-appropriate academic language usually requires five or more years of academic learning in English (Cummins, 2001). As will be seen later, the rate of acquisition appears to be impervious to whether children are in Structured English Immersion or Transitional Bilingual Education programs.

Rather than accelerate English acquisition, the subtraction of native language development serves to deprive children of the numerous benefits conferred by bilingualism. While affirming the importance of English language acquisition, most recent research on positive models of immigrant adaptation points to the importance of children retaining the ability to function in their original culture even as they attain a new one. Portes and Rumbaut (2001) refer to this ability to manage both cultures as "selective acculturation," the most advantageous way for children to become integrated into American society. In this framework, children are typically fluent in both languages, minimizing intergenerational conflict and preserving
parental authority. "Dissonant acculturation" emerges when there is a loss or a rupture with the culture of origin, including limited bilingualism or the loss of original language, thereby rupturing family ties and bringing inter-generational conflict (Portes \& Rumbaut, 2001, pp.
52,145 ). A positive process of "selective acculturation" has been associated with all indicators of high school academic performance-math, reading, and grade point average (Portes \& Rumbaut, 2006).

In what seems a move away from looking at the association of language instructional approaches and academic performance among English Learners, increasingly researchers are identifying other school-level variables as key to the success of English Learners (Parrish et al., 2006; Rennie Center, 2007; Williams et al., 2007). Engaging children in schooling, ending the segregation of programs, providing opportunities for informal communication between English speakers and speakers of other languages, and allowing enough time for language to develop before forcing arbitrary performance standards are seen as critical factors in the success of children in learning English (Suárez-Orozco \& Suárez-Orozco, 2001; Suárez-Orozco, Suárez-Orozco, \& Todorova, 2008). Other critical school-based factors are the use of assessment data to improve student achievement and instruction; availability of instructional resources, including experienced principals and well trained teachers (Williams et al., 2007; Rennie Center, 2007); coherent and standards-based curriculum and instruction; and prioritizing student achievement based on measured and monitored objectives (Williams et al., 2007). Clearly English Learners, like native English speakers, benefit from being in good schools. But what are the effects of using different instructional approaches? This question will be examined in the next section.

## 2. Maintenance, Transition, or Immersion

The umbrella term "bilingual education" refers to several instructional approaches which can be classified by their purpose into "transitional," "maintenance," and "enrichment." Transitional programs include SEI, early-exit TBE, and ESL pullout, and are designed to move students fast into regular education and gain fluency in English at the expense of home language development. Maintenance models take a "developmental" approach by allowing students to learn content in their own language while acquiring English at their own pace. Late-exit transitional programs tend to fall in this category although they were originally designed to be transitional. Students maintain their native language temporarily while they acquire enough English proficiency to do coursework in regular classrooms. Both immersion and maintenance programs have been called "subtractive" because their goal is to subtract the native language in favor of English acquisition. The enrichment model-i.e. two-way or dual immersion programs-is different because it is designed for all students to add a language. English speakers who participate in these "additive" programs emerge with a second language, while English Learners preserve their home language and acquire English. All students become bilingual, bi-literate, and bicultural (Rivera, 2002).
Research on "enrichment" or "additive" programs-i.e. two-way bilingual education-is largely uncontroversial. Bilingualism confers multiple advantages such as higher academic achievement (Genesee et al., 2006), cognitive flexibility (Bialystok, 1986), reduced family conflict (Portes \& Rumbaut, 2001), and more marketable skills in the global labor market of the 21 st century. Also uncontroversial is evidence against English immersion without native language instruction, the old "sink or swim" approach declared unconstitutional in the 1974 landmark Lau v. Nichols ruling by the U.S. Supreme Court. We also know for sure that "after
two to three years of first and second language reading instruction, the average student can expect to score about 12 to 15 percentage points higher than the average student who only receives second language reading instruction" (Goldenberg, 2008, p. 16). This finding is solid, as it has been confirmed in five separate meta-analyses, but it is also limited to reading. The claim is that teaching students to read in their first language promotes higher levels of reading achievement in English.

Still ambiguous is research on the relative benefit of length of time in transitional bilingual programs, amount of language instruction, combinations of first and second language provided in instruction, interaction of different approaches with different child characteristics, and benefit of different types of instruction to different language groups (Goldenberg, 2008). Perhaps because of this ambiguity, in the last two decades researchers have engaged in heated debates about the relative merits of Transitional Bilingual Education and Structured English Immersion. At issue have been the research design and findings of several key studies including those by Ramírez et al. (1991), Thomas and Collier (2002 and its previous iteration), August and Hakuta (1997), Rossell and Baker (1996), and Greene (1997). Some of the controversies include whether the Canadian immersion models should be included as evidence that the "time-on-task" principle advocated by SEI proponents works, as evidence for two-way bilingual programs (Cummins, n.d.), or not included at all (Genesee et al., 2006). Program labeling and mislabeling is also a considerable issue (Krashen, 1996, 199b). Ultimately, Goldenberg (2008) ${ }^{12}$ points out that, because of different criteria used to include studies on the effects of bilingual education on academic achievement, the National Literacy Panel review does not support the Center for Research on Education, Diversity and Excellence's (CREDE) contention that the longer students are in a program with primary language instruction, the better they do in English. Thus, it seems reasonable to conclude that we do not know which is better, Transitional Bilingual Education or Structured English Immersion. What we do know is that, when immersed in English, English Learners need instructional modifications that address their language limitations.

Another question that remains open is whether and how oral English development can be accelerated. It appears that progress from preproduction to native-like proficiency takes at least six years for most students, with progress from beginning to intermediate levels taking place faster than from intermediate to full proficiency. It also appears that students in allEnglish instruction do not begin to show higher intermediate levels of English proficiency for at least four years-i.e. immersion in all-English instruction does not significantly accelerate English acquisition (Goldenberg, 2008). Thus, there is no research evidence supporting current legal provisions that children who are English Learners can be "educated through sheltered English immersion during a temporary transition period not normally intended to exceed one school year."

Rather, evaluations of SEI implementation in California and Massachusetts are confirming the estimate that it takes at least five years to become proficient in English. In California, Parrish et al. (2006) have estimated the probability of an English Learner being re-designated as English proficient in ten years as lower than $40 \%$. In Massachusetts, the Rennie Center found that in 2006, of all first-year ELs entering Grades 3 through 12, only 19\% were ready to be transitioned based on MEPA (Massachusetts English Proficiency Assessment) scores. ${ }^{13}$ Only students who had been in the system for five years or more were transitioned at a higher rate (55\%).

In addition to considering the research evidence, this review would not be complete without reference to the legislative and civil rights issues represented in the establishment and dismantling of Transitional Bilingual Education. The reader should keep in mind that Transitional Bilingual Education first emerged as one of the recommendations included in the "Lau remedies" by a task force established under the US Office of Civil Rights (OCR) to comply with the U.S. Supreme Court ruling in the landmark Lau v. Nichols ${ }^{14}$ decision of 1974. These recommendations were eventually incorporated in the reauthorizations of the Bilingual Education Act of 1968 known also as Title VII of the Elementary and Secondary Education Act. In 1971, Massachusetts was the first state in the nation to legally mandate instruction that used native language in the education of children who arrived in schools with limited knowledge of English. Already at the outset, and more over time, the implementation of this law was subject to considerable criticism. Of greatest concern was the fact that English Learners remained in transitional classrooms, segregated from English speakers, for considerably longer periods of time than originally intended, and that bilingual teachers and students were not held to the same accountability standards as the rest. For example, in 1997, when the state mandated that all third grade students take a reading test, only $58 \%$ of English Learners did so-as opposed to $99 \%$ of students with Special Education needs. In 1998, the percentage of EL students taking the test dropped to $42 \%$ (Porter, 1999). Eventually these and other concerns over the implementation of Transitional Bilingual Education fed the momentum for change, and change came in the form of Question 2.

## 3. Current Implementation of Sheltered English Immersion

The Massachusetts Department of Elementary and Secondary Education issued guidelines stipulating what constitutes Sheltered English Immersion and what kind of training teachers must receive to learn this instructional approach. First, Sheltered English Immersion (SEI) should have two components: sheltered content instruction and English as a Second Language (ESL) instruction. Students in structured or sheltered content instruction have teachers who are trained to use "sheltering" techniques and adapt the presentation of content to students' proficiency level. The Massachusetts DOE has identified four categories of skills that teachers need to have in order to teach sheltered content. Training in the four categories takes a total of approximately 75 hours (Rennie Center, 2007).
Content sheltering techniques include using supplementary materials such as manipulatives, everyday objects, visuals, multimedia, demonstrations; adapting content to make it comprehensible; posting daily language objectives along with daily content objectives; helping students connect classroom concepts with their own lives through meaningful activities, and so forth (Echevarria, Vogt, \& Short, 2004). Ideally, an SEI teacher knows how to speak English Learners' native language. Some believe that native language should be used as a last resort only when all other forms of communication are not effective (Rossell \& Baker, 1996). Others envision the teacher using the primary language to expand vocabulary and word usage, and to begin building the "academic" language that is important for school success. For example, a teacher who speaks both English and Spanish can explain to a student that the Spanish suffix idad is equivalent as the English ity (Wong-Fillmore \& Snow, 2000, cited by Gándara, Maxwell-Jolly, \& Driscoll, 2005). It is also important for teachers to have some background knowledge of ELs' home cultures. Especially useful is having an understanding of the language and of the kind of learning experiences students have at home in order to build on those experiences (Hansen-Thomas, 2008).

English as a Second Language (ESL) instruction is direct instruction about the English language, including oral, listening comprehension, reading, and writing by a teacher trained in teaching ESL. Students should receive between 1.5 to 2 hours of ESL instruction per day. A good ESL classroom includes sustained verbal interaction, often in small groups, project-based instruction, thematic units, and alignment of language instruction with gradeappropriate content standards (Rennie Center, 2007). Case studies of three schools located in different Massachusetts districts completed in the Rennie Center study (2007) show that they have implemented instructional approaches combining sheltered content with ESL in different ways, based on their students' needs. This flexibility in implementation is lauded as a desirable approach to English Learners. However, evidence from Arizona suggests that some districts and schools may be implementing structured immersion as if it were Englishonly immersion. Five years after the adoption of Proposition 203 (SY2004-2005) in Arizona, a number of experienced teachers of English Learners in highly impacted elementary schools, who had received SEI training and were heading classrooms designated by law as SEI, thought they were teaching "mainstream" classrooms " (Wright \& Choi, 2006). "We've been told ... good teaching ... it will help everybody" (p. 41). This finding is troublesome as it speaks to lack of implementation of the law as it stands now. There is evidence that when ELs are placed into mainstream classes whose teachers do not have the adequate knowledge on how best to work with them, these EL students struggle and fall behind academically (Facella, Rampino, \& Shea, 2005).

## 4. The Implementation of Restrictive Language Policies in Other States

Aside from the conceptual changes that restrictive language policies enforce, they also represent a shift in the practices of districts and schools. Implementation in California and Arizona, which preceded the Massachusetts changes, has often been marked by a lack of specificity about what the law allows and a lack of clear operational definitions of instructional approaches, leaving districts and schools to interpret the law and develop practice essentially on their own. The results are that districts and schools differ widely in their implementation, and this implementation is largely based on the districts' and the schools' attitude toward bilingual education. This diversity in interpretation has resulted in wide divergence in the types of programs available to ELs after these policies.

### 4.1 Approach to Policy Implementation as a Factor in Outcomes

California, for example, exhibits tremendous variation in the program models being implemented (Parrish et al., 2006). Gándara and colleagues (Gándara, 2000; Gándara et al., 2000) reported on the impact of Proposition 227 in California and observed that the districts' decisions on how to handle parents' right to request waivers of SEI made a profound difference in the type of programs districts offered. On the one hand, districts which had strong bilingual education programs and, after 227's passage, actively supported parents' rights to request waivers were, in most cases, able to substantially retain their native language programs. In many ways, their practice was not changed drastically by Proposition 227. On the other hand, in those districts with a lukewarm or negative attitude toward bilingual education, there tended to be less commitment to enforcing parental waiver rights and more concern with following the strict letter of new law. In these districts, language programs declined and SEI programs proliferated.

Wright and Pu (2005) argue that outcomes for children were also affected by approaches to implementation. In the case of Arizona's Proposition 203, during the first two years of
implementation parents were allowed to waive participation in SEI resulting in the presence of a wide variety of offerings for children. In 2003, a stricter enforcement of the waiver provisions began, narrowing the school districts' options. Wright and Pu (2005) observed that in the first two years, there was a small reduction in the gap between ELs and others in the results of the Arizona Instrument to Measure Standards (AIMS) and the Stanford 9 in 2002 and 2003; this gap widened in 2004, the first year of the new, stricter enforcement of English-only education programs. The authors argued that improvement in test scores between 02 and 03 was due to greater flexibility for schools in offering ESL and bilingual education, while the decline of scores in 2004 corresponded to a period of forced closure for most bilingual programs and mandates for English-only instruction for ELs. The ineffectiveness of restrictive language policies is substantiated in a subsequent survey of third grade teachers of ELs (Wright \& Choi, 2006), 70\% of whom disagree or strongly disagree that Proposition 203 resulted in more effective programs for ELs.

### 4.2 Changes at the Classroom Level

The confusion and the changes in policy implementation have had their harshest effects on the instruction at classroom level because the SEI-required changes have coincided with the demands posed by other education reform efforts in the state-such as the implementation of accountability regimes (Gándara, 2000). Some report a deterioration of teaching practice when SEI forces instruction devoid of a context familiar to the student and focuses exclusively on learning English language sounds, or where oral fluency trumps literacy in order to assure performance on English language tests (Gutiérrez, Baquedano-López, \& Asato, 2000). Gándara (2000) reports that teachers expressed "fear" and "confusion" about how to shape their instruction so that it met accountability standards (that is, that ELs learn content) while keeping to the spirit-and staying away from the teacher sanctions- of Proposition 227. This trepidation was echoed in Wright and Choi's Arizona study, which showed that teachers felt confused about what is and is not allowed in SEI classes according to the new laws; teachers felt they had not received guidance about what appropriate instruction for ELs means for teaching or for students' learning (Wright \& Choi, 2006).

### 4.3 The Importance of the Professional Capacity of Teachers

Although some educators argue that teachers do not need any special certification to teach ELs, other than being fluent in English, research points to the need for specific training and ongoing support. Wright and Choi (2006) argue that SEI classes should be taught by certified teachers to ensure proper attention for these students. Sufficient allocations of funding are necessary not only to provide classroom materials and resources, but also to support appropriate training, support, and professional development for teachers and administrators (Wright \& Choi, 2006). Although our review of research points to the need for specific training and ongoing support for teachers implementing SEI, both the California and Arizona evaluations found inadequate professional development to support SEI instruction. Gándara et al. (2003) found that in California English Learners "are more likely than any other children to be taught by teachers with an emergency credential" (p. 8). Schools with higher concentrations of ELs also have higher concentrations of teachers who are not fully credentialed. The California evaluation's findings (Parrish et al., 2006) were consistent with those of Gándara and her colleagues. "As the concentration of ELs in the schools increases, the percentage of fully credentialed teachers decreases.... The disparity in teaching resources is even greater looking at the credentials in English Language Development (ELD) and Specially Designed Academic Instruction in English (SDAIE). Schools with lower concentrations of ELs have about 28 ELD and 12 SDAIE credentialed teachers per 100 ELs whereas schools with
higher concentrations of ELs have about 3 ELD teachers and 1 SDAIE teacher per 100 ELs" (pp. 1-10). ${ }^{15}$
In Arizona, the requirements for the new "SEI Endorsement" are far lower than those required for teachers of English prior to Proposition 203, according to Wright and Choi (2006). The new "SEI endorsement" involves 15 initial clock-hours of training to be followed by 45 clock-hours several years later (p. 43). This training is $88 \%$ less work than the 18 units of college coursework required for "ESL Endorsement," the credential that was in place for teachers of English Learners before Proposition 203. These authors argue that this policy creates a way for mainstream classrooms to be converted to SEI classrooms in name only, as the teachers are not trained to provide adequate instruction to English Learners (p. 44). Ironically, it is the teachers with most preparation who best understand the inappropriateness of teaching and assessment tools, as well as the lack of support they face to teach ELs (Gándara, Maxwell-Jolly, \& Driscoll, 2005). So, lack of training may not be easily apparent from teachers' discourse, as untrained teachers may well be unaware of their unpreparedness to work with ELs.

### 4.4 Outcomes of the Policy Change

Initiative campaigns in the three states promised improvement in the academic outcomes of English Learners. The laws promised a rapid way to English proficiency and so the intention of the new policy is that children stay in the programs for only one year. In the five-year state-mandated evaluation of the implementation of Proposition 227 in California, Parrish et al. (2006) report that the "probability of an EL being re-designated to fluent English proficient status after 10 years in California" was less than $40 \%$ ( p . ix), with wide variation across districts dependent upon student as well as school characteristics. In Arizona, some analysts have reported that students in SEI have improved their English language skills more rapidly than those few students who are still enrolled in bilingual education settings (Arizona Department of Education, 2004). Others researchers claim that these results fail to take into account factors such as the initial proficiency in English of the students, the length of time they have been in the United States, or their family's income status, which is a significant predictor of standardized tests results. Furthermore, there is no researchbased description of the type of instruction students are receiving either in the immersion or the bilingual program (Krashen, 2004). Many researchers estimate that the time any given student needs to become academically proficient in a second language is between three and six years and that the rate cannot easily be accelerated, even with rich content instruction (Genesee et al., 2005; Hakuta et al., 2000; Pray \& MacSwan, 2002; Suárez-Orozco, SuárezOrozco, \& Todorova, 2008).

Evidence from both California and Arizona shows that the change in policy has not had a substantial impact on academic outcomes and, perhaps more importantly, that the outcomes of ELs still remain relatively low in these states (Crawford, 2004). Parrish et al. (2006), in evaluating of the effects of Proposition 227 on the education of ELs, measured outcomes in terms of performance in high-stakes testing, performance in relation to different instructional methods, student re-designation, and student engagement. In terms of performance on high-stakes tests, the authors reported that the achievement gap remained virtually constant in most subjects for most grades. Given the slight changes in performance overall, pending questions about the data, and the inability to isolate change due to Proposition 227 from change due to the passage of No Child Left Behind, the authors concluded that overall, "there is no clear evidence to support an argument of the superiority of one EL instructional approach over another" (p. ix). In Arizona, Wright and Pu (2005) reported on outcomes two,
three, and four years after the implementation of Proposition 203. Using the AIMS (Arizona Instrument to Measure Standards) they measured performance on math tests, reading and writing tests, and the Stanford 9 test. Performance on the AIMS showed a steady achievement gap between ELs and all students. In AY2002, AY2003, and AY2004, around 30\% of ELs passed the math portion of AIMS compared to an average $65 \%$ of all students. Similarly, an average of $35 \%$ ELs passed the reading test vs. $75 \%$ of all students. A considerable achievement gap is obvious on Stanford 9 results for the same time period as well. ELs performed worse than all students in language, math, and reading by 28,26 , and 33 percentage points respectively. The gap increased for all Stanford 9 subtests between AY2003 and AY2004.
The implementations of restrictive language policies in California and Arizona were far from a well-planned and well-directed execution. In many ways, the serendipitous manner in which districts and schools implemented these policies in California allowed for some creativity as well as an opportunity for developing more appropriate responses for English Learners. The student outcomes in both states remained largely unchanged from before the restrictive language initiatives, and there seems to be no clear evidence that the speed of English acquisition has accelerated with SEI instruction. The experiences of ELs in these states provide the backdrop as we examine similar phenomena in Massachusetts.

## Implementing Question 2

The experiences in both Arizona and California show that the process of implementation of restrictive language policies has an effect on the type and quality of the programs developed in response and therefore on student outcomes in these programs. This section focuses on the issues which marked the implementation of Question 2 in Boston. To set the stage, we begin with a brief review of the law and the responses at the state level.

## 1. From "Referendum Question 2" to Programs for English Learners

Referendum Question 2, which passed in November 2002, became law as Chapter 386 of the Acts of 2002 in December and was implemented across the state in the Fall of 2003. Chapter 386 defines Sheltered English Immersion as the method of English language acquisition in which most classroom instruction is in English but with a curriculum and a presentation appropriate for English Learners (Commonwealth of Massachusetts, 2002). As is common in SEI models, the law requires that books and instruction materials be written in English and that academic subjects be taught in that language, although teachers may use a minimal amount of the child's native language when necessary. In order to minimize the use of native languages, the law encourages that children of different languages and similar English fluency be placed together. As in California and Arizona, the law has the goal that children could stay in the program FOR one year, after which children cease to be "English Learners" and are placed into General Education classrooms..

### 1.1 Accountability

Chapter 386 mandates that districts identify students of limited English proficiency every year and that students in Grades 2 through 12 be tested yearly to assess English proficiency using a nationally normed test and to assess progress in academic areas using a standardized test in English of academic subject matter. Massachusetts meets the requirements for testing English proficiency with the Massachusetts English Proficiency Assessment (MEPA). The MEPA-R/W assesses proficiency in reading and writing at grade spans 3-4, 5-6, 7-8, and 9-12, while the MELA-0 assesses LEP students' proficiency in listening (comprehension) and speaking (production) at Grades K-12 (MDESE, 2008b).

The requirements for subject matter testing are met through the Massachusetts Comprehensive Assessment System (MCAS), which was established as part of the Massachusetts Educational Reform Act of 1993. At the time of the observations for this study, MCAS tested English Learners in Reading (Grade 3), English Language Arts (Grades 4, 7, and 10), Math (Grades 4, 8, and 10), and Science (Grades 5 and 8) (MDESE, 2008a). English Learners who have been in U.S. schools for less than one year are exempt from the ELA test, and Spanish Speaking ELs who have been in US schools for less than three years may take a math test in Spanish in Grade 10 (MDOE, 2003-2006). Students must pass Grade 10 Math and ELA in order to graduate from high school; the high-stakes requirement began with the tenth grade testing in AY2001 and was a graduation requirement for the class of 2003, the year before the beginning of the implementation of Question 2 in Massachusetts.

### 1.2 Waivers

As was true in both California and Arizona, the law allowed Massachusetts parents or guard-
ians to request a waiver of enrollment in an SEI program. If the waiver is granted, the child can attend a bilingual education program, which must be offered when more than 20 children who speak the same native language at the same grade level in a school receive a waiver) (Commonwealth of Massachusetts, 2002). Waivers are cumbersome for both parents and schools and favor secondary over elementary school students. Parents can request a waiver if the student already knows English and is at least 10 years old, if the school principal and teachers believe it is in his/her best interest, or if the student has special physical or psychological needs. The law requires that the parent request the waiver personally and that he/she be provided accessible information about all the programmatic options available. A parent must request a waiver annually. Waiver requests for children over 10 years of age can be approved by the principal, but for children under 10 the requirements are stricter: the student must be in an SEI program for 30 days, the teacher and the principal must make a case for why the child should be placed in a different type of program, and the waiver must be approved by the Superintendent of the district.

### 1.3 Readiness for Implementation.

As was also the case in California, the Massachusetts' Chapter 386 was not a clear blueprint for implementation. The legislature was specific about the use of language in instruction and about accountability, but it left it to the state Department of Elementary and Secondary Education to develop guidelines for the districts on several crucial matters. These included the academic content of the SEI programs and how these could be made to comply with state curriculum frameworks, the criteria to be used in transitioning students from the programs to mainstream classrooms, and the type of training that would be required for teachers (Rennie Center, 2007). The legislature did not clearly address the responsibility of districts to inform parents of their right to waivers. Finally, it also provided no budget relief to the Department of Elementary and Secondary Education to facilitate the implementation of the law-including, particularly, the required training of the teacher corps.

In April 2003 the Massachusetts Board of Education published regulations for the new law, affirming the right of parents to opt out of the programs and place their children in other forms of bilingual education, but it offered little guidance overall about implementation (MDOE, 2003a). Also in the legislative period in 2003, lawmakers approved an amendment which allowed Two-Way immersion programs as an option, assuring the survival of programs which were popular and whose excellence in addressing the needs of English Learners was well recognized.

During the summer of 2003, as districts readied to implement the programmatic changes in September, the Department of Elementary and Secondary Education created a two-year SEI initiative to develop plans to implement the policy. ${ }^{16}$ The Department invited 30 districts with more than 100 LEP students to work with them in this initiative, using federal funds provided to the state under Title III. ${ }^{17}$ As a first step, it issued language proficiency requirements for teachers under Question 2 and guidelines meant to help districts maneuver through the transition (MDOE, 2003b, 2003c). These guidelines describe the elements of SEI and the ways in which languages other than English can be used in the classroom; reiterate the support for a broad set of offerings in addition to SEI for students who are waived by parental action out of the SEI programs; and define the training needed by teachers (MDOE, 2003d). These guidelines were issued by the Department in August of 2003, days before the start of the school year in which the changes required by Question 2 began to be implemented in the Commonwealth's schools.

### 1.4 Assessments of the Implementation of Chapter 386

Massachusetts has not yet fielded a comprehensive evaluation of the implementation of Chapter 386 and its impact on English Learners. Initial research shows that models of implementation have varied substantially across the districts (DeJong, Gort, \& Cobb, 2005; Rennie Center, 2007).
1.4.1 Models of Implementation and the Role of the Waiver Provisions. As was the case in California, districts have developed a wide array of programs in response to Question 2. Some have continued to cluster their students by language group while others mix students of different language groups. Some districts have interpreted the law's requirements flexibly and creatively and have developed of an array of programs for their students (DeJong, Gort, \& Cobb, 2005; Rennie Center, 2007).
As in California, a district's approach to the waiver provisions marks its ability to retain programmatic flexibility. Massachusetts' districts have developed diverse approaches to the waiver provisions and some districts encourage parental waivers while others do not. Districts which have encouraged parental waivers have retained their bilingual education programs while offering SEI as an alternative. This is possible because the law requires that districts develop alternatives to SEI in schools where more than 20 children of one language other than English are enrolled and have had their waivers to SEI approved by the district. By using the waiver provisions, districts currently implement a broad range of programs including Two-Way Bilingual programs, ESL, TBE, World Language, and General and Modified Bilingual Education programs in addition to SEI (DeJong, Gort, \& Cobb, 2005; Rennie Center, 2007). For example, of the three districts described by DeJong, Gort, and Cobb (2005), two were able to maintain their high school bilingual programs while the third, already implementing a program similar to SEI prior to Question 2, continued it. At the elementary level, one district was able to maintain its TBE program through a concerted waiver effort involving parents, teachers, and the district.

Others have in practice made it difficult for parents to obtain waivers by not informing parents of their rights or by creating alternative processes to bypass enrollment in programs for English Learners. In these districts nearly all of the students requiring support in language acquisition are enrolled in SEI programs. This is the case of Boston, as we will illustrate below.

There have been no studies similar to the ones conducted in California which shed light on these differences in district policy and program decisions. The California research reported above indicates that those districts with strong bilingual education programs and strong commitment to teacher training have been motivated to retain most programmatic flexibility (Gándara, 2000; Gándara et al., 2000).
1.4.2 Professional Development of Teachers. The training of teachers in SEI practices has also varied. At first the attention focused on the qualifications of existing TBE teachers and particularly their command of English (MDOE, 2003b, 2003c). In June 2004, after a year of implementation had passed, the Department of Elementary and Secondary Education provided guidance as to the types of skills necessary for SEI instruction and began to develop training for teachers. ${ }^{18}$ The training involved both ESL and sheltered academic content instruction. ESL teachers required licensing at the appropriate grade level. The skill areas in content instruction included: Category 1: Second Language Learning and Teaching; Category 2: Sheltering Content Instruction, Category 3: Assessing Speaking, and Category 4: Listening, Reading and Writing in the Sheltered Content Classroom (Rennie Center, 2007).

Districts were instructed to develop 75 hours of professional development covering the four categories. Sixteen districts received grants to develop their own curricula while adhering to state standards, but most recently the state has contracted with two local universities to work on the development of SEI trainings for teachers. In 2006, the Rennie Center (2007, p. 3) reported that $35 \%$ of the estimated number of teachers requiring content training had received it and that $64.2 \%$ of the state's ESL training needs had been met.
1.4.3 Student Outcomes. So far, there have been no analyses of the outcomes of students under SEI across Massachusetts or in individual districts. The only report of outcomes of English language acquisition post-Question 2 comes from the Rennie Center (2007), which found that, after one year in Massachusetts schools, the proportion of ELs transitioning out of the program reached above $22 \%$ only in Grades 3 and 4.

## 2. Implementing Question 2 in the Boston Public Schools

Boston, the site of the struggle that led to the first state-mandated Transitional Bilingual Education in the nation in 1971, ${ }^{19}$ voted overwhelmingly against Question 2. It had reason to be concerned about the change in perspective and in practice, not only for historical reasons, but also because the district enrolled the largest number of students of limited English proficiency in the state. It was a typical urban district with $75 \%$ of its students poor and of color, with great racial/ethnic diversity and a growing complement of immigrant students within these groups (Table 1). In AY2003 in Boston, $42.6 \%$ of the enrollment consisted of children whose first language is not English and $23.1 \%$ were children whose English proficiency did not allow them to handle class work in English.

Table 1. Demographic Characteristics. Boston Public Schools, AY2003

| Total Enrollment | $\mathbf{6 3 , 7 7 7}$ |  |
| :--- | ---: | :--- |
| A. Gender (\% male) | $51.4 \%$ |  |
| B. Poverty Status (receiving free or reduced price lunch) | $75.9 \%$ |  |
| C. Race/Ethnicity | Asian/Pacific Islander | $8.7 \%$ |
|  | Black | $47.1 \%$ |
|  | Latino | $29.6 \%$ |
|  | White | $14.2 \%$ |
| D. Native Language Not English |  | $42.6 \%$ |
| E. Limited English Proficiency | $23.1 \%$ |  |

Note: (1) BPS enrollments do not match official figures because of exclusions. See Appendix 1.

### 2.1 Boston under Transitional Bilingual Education

The implementation of TBE in Boston had a checkered history marked by official inattention and a struggle for accountability waged primarily by parents. The well-documented process of desegregation of the Boston Public Schools coincided with the early implementation of TBE and largely submerged it. Parents, organized in the Master Parent Advisory Council (MasterPAC), negotiated a voluntary Lau Compliance Plan with the Boston School Committee in 1979 to comply with the US Office of Civil Rights' Lau Remedies, which followed the Supreme Court's ruling for the plaintiff's in Lau v. Nichols in 1974 (Boston Public Schools,

1999, p. 14). This voluntary compliance plan was amended in 1981, 1985, and 1992. In 1990, parents of bilingual children sued the district successfully, obtaining a consent order mandating the district to provide bilingual students with equitable services (Boston Public Schools, 1999, p. 13). This willingness on the part of MasterPAC parents to press strongly for the rights of their children led one BPS superintendent to exclaim that the district was nurturing the organization of the parents so that these, in turn, would sue the district. ${ }^{20}$ The Boston School Committee defunded the MasterPAC's activities in 1999, the parents sued and lost, and the MasterPAC was disbanded in 2001.

The bilingual programs evolved in the shadow of the parents' struggle against the district. It was a process marked by great successes—such as the deployment of Transitional Bilingual Education in more than nine languages, the involvement of 80 schools in the program, the development of excellent Two-Way bilingual programs, and the implementation of literacy programs for students who come to the district with interrupted or no schooling in their home country (Boston Public Schools, 1999). The district offered four models of bilingual instruction:

- TBE—at all levels in Spanish, Haitian Creole, Greek, Cape Verdean Creole, Portuguese, Chinese, Cambodian, Vietnamese, and Somali.
- Two-Way Bilingual Programs in Spanish/English. Two-way bilingual programs serve both bilingual and monolingual students and are designed to encourage students to learn two languages and develop proficiency in both languages.
- Multilingual Education at each grade level. In this model, LEPs from different language backgrounds are grouped together and receive content-based instruction from a trained ESL or bilingual education teacher.
- Native Language Literacy Programs at all grade levels in Spanish, Haitian Creole, Cape Verdean Creole, and Somali. This is a two-year intensive literacy program designed for students 9-21 years of age who come to the US with limited or no schooling. BPS is required to provide this service as part of the Title 1 Consent Decree.

The program was often referred as a "community" which nurtured newcomer children and oriented immigrant parents, many of whom were undergoing a great transition in their lives. ${ }^{21}$ But, as was true at the state level, there had been no consistent documentation or evaluation of bilingual programs that could shed light on the effect of their implementation in Boston (DeJong, Gort, \& Cobb, 2005).

Both the document review and the interviews conducted for this study revealed concerns about the effectiveness of TBE in Boston. These concerns included the number of years some TBE students remained in the program, which in some cases reached six years, according to the 1999 report by the Bilingual Education Task Force (Boston Public Schools, 1999, p. 19). Transitions faced barriers such as the lack of available space in General Education classrooms, problems with the timeliness of evaluations, and parental resistance to the transition (pp. 17-18). ${ }^{22}$ There were concerns about the professional qualifications of bilingual education teachers and particularly their command of English. ${ }^{23}$ In terms of the program, there were concerns about the lack of a uniform curriculum; about the lightness of the monitoring, support, and supervision of the programs ${ }^{24}$; and about the isolation of bilingual students from others. ${ }^{25}$

Interviewees reported that they perceived a pervasive lack of understanding among staff at all levels in the district of the conceptual underpinnings of Transitional Bilingual Education (reflected in the common refrain "You learn English by learning in English"), and the role of
the primary language in the teaching of a second language. ${ }^{26}$ Because there was little understanding of the needs of children learning a new language, there was resistance to accepting the requirements of students with limited English proficiency and resentment toward what was seen as "favoring" ELs over other students in BPS. Without appropriate funding, knowledge, and leadership, these concerns and conflicts went unresolved in the politicized and racialized environment of the Boston Public Schools.

### 2.2 Early Implementation of Question 2

Boston began the implementation of the changes demanded by Question 2 in difficult circumstances: limited state guidance and support, contested perspectives on the existing TBE program, a recently dismantled structure of parental participation, a teaching corps largely unfamiliar with bilingual education and the instructional requirements of SEI, and, finally, the state's largest population of ELs representing the most diverse set of languages. Many issues marked the implementation of Question 2 in Boston; here we focus on those that shed light on the overall findings shown by the quantitative data: issues related to the planning for the implementation of Question 2, and those that affected the identification and assessment of LEP students.
2.2.1 Planning the Change. The Office of Language Learning and Support Services (OLLSS) stood at the center of the planning and implementation of Question 2 in Boston's schools. OLLSS, located in the district's main offices, had a cadre of very experienced educators in bilingual programs representing the major languages in the Boston district. For many years, under the name of Bilingual Department, OLLSS had monitored the implementation of bilingual education, assured compliance with federal and state mandates, communicated with and mentored programs on an ongoing basis, managed the work of the parents' MasterPAC, and represented the interests of limited English proficiency students in the district, among other responsibilities.

In 1999, still under TBE and at the suggestion of the Bilingual Education Task Force charged with recommending ways to support Boston's compliance with Lau, the Superintendent expanded the role of the Bilingual Department (renaming it the Office of Language Learning and Support Services, or OLLSS) and placed it under the supervision of the Deputy Superintendent for Teaching and Learning. The office was charged with its traditional role vis a vis curriculum, program, compliance, and accountability but it was now to share responsibility with other units for a range of services. For example, it shared responsibility for communicating achievement data to parents with the Communications Office; professional development was a shared responsibility with the Center for Leadership Development; and with the Office of Research, Assessment and Evaluation and the Office of Information Systems, OLLSS was charged with creating a database of bilingual students to support the administrative, programmatic, and accountability tasks (Payzant, 1999). The expansion placed OLLSS at the center of the management and implementation of bilingual programs in the district but dependent on other units for accomplishing these tasks.
When Question 2 passed, planning moved forward under the principle that the transition would be "orderly and disciplined" (Boston Public Schools, n.d.). In spite of its size and its large number of students with limited English proficiency, the state made no special provisions to assist Boston with the challenges of the implementation of Question 2. "Boston was treated as all the other districts." ${ }^{27}$ Boston followed the Department of Elementary and Secondary Education's guidelines that all students identified as LEP be tested in the Spring of 2003; that faculty and parents be informed of the provisions of the new law; that procedures for granting individual waivers be developed; and that plans for professional development
be instituted (Payzant, 2003). BPS defined the programs it would support under the new law (Multilingual ESL, Two-Way Dual Language, SEI, and Native Language Literacy). The district also provided some guidelines on instruction, emphasizing that it must be comprehensible and that native language could be used by teachers to clarify concepts, give instructions, and manage behavior in the classroom (Payzant, 2003). Planning also called for the following:

- TBE students were assigned to SEI and General Education according to the level they attained in TBE. Their level of English proficiency corresponded to five stages, with the first stage being the beginning English Learners and the fifth stage being students who were closest to English proficient. Most of the Stage 3 and all of Stage 4 and 5 students $(4,366)$ exited to General Education and all of the Stage 1 and 2 students $(5,442)$ went into SEI programs (Boston Public Schools, 2006). Although many of these students who were moved to General Education continued to be classified as LEPs, they ceased receiving language support services.
- TBE teachers and the students still in EL programs would remain in the existing language-specific TBE sites to insure a smoother transition for students, and that teaching resources would be in place for schools' implementation of SEI instruction and for communication with students' families. TBE teachers would teach SEI.

By most interview accounts there was much confusion about the changes Question 2 entailed. For some, Question 2 meant that bilingual programs would be disbanded and that special instruction for ELs would disappear. ${ }^{28}$ But even for more informed staff, there was little clarity about what SEI was and what it meant for both TBE and General Education teachers; about the difference between language and content instruction, and about the role of native language in instruction. ${ }^{29}$ Interviews reflect that the district, aside from providing a broad framework, did not provide strong leadership in the transition process.

In practice, interviews suggest, principals were given the autonomy to transform programs as they saw fit, leading to great variability in the type and quality of programs across the district. Similar variability can be found in the level of compliance with the basic framework laid out by the district. There has not been an assessment by program or by school of the nature of this diversity, the factors that led schools to make their choices, and their impact on student outcomes.

In explaining the lack of clear and forceful direction in the process of such a large programmatic change, interviewees focused on the impact of the redefinition of the role of the central office vis a vis the schools; the new approach favored providing schools with guidance, technical assistance, and resources rather than exerting strong direction over the schools. So OLLSS, although publicly charged with leading the process of transition, did not have the power or the authority to direct the implementation. ${ }^{30}$ Other inerviewees focused on the lack of a clear understanding at all levels, not only about what ELs need in order to learn a new language and to achieve academically, but even the fact that the new law did not mean that programs for ELs would disappear. Others, including the Citizens' Commission on the Academic Success of Boston's Children (2006), were not so kind as they cited the lack of high-level leadership as one of the "most urgent concerns ... in addressing the challenges posed by Question 2" in Boston (p. 70).

The lack of guidance received from the Massachusetts Department of Elementary and Secondary Education was not helpful to Boston's implementation. At times the district had pressure to act on issues about which the state had not yet issued regulations or guidance. ${ }^{31}$ The fact that Boston, in spite of its size, was treated the same as other districts
belies the complexities of making such an encompassing change in such a short period in such a large system. One interviewee expressed that the district "is like an ocean linercan't change direction quickly. ${ }^{32}$
2.2.2 "Waivers" and "Opting Out." As was discussed above, the parental "waiver" provisions of the law allow parents to petition to have their children exempted from SEI programs. This waiver does not disqualify students from enrolling in others models of programs for English language acquisition or from receiving language support services. In fact, the law requires districts to develop alternatives to SEI in schools where more than 20 children of one language other than English are enrolled in the same grade and have had their waivers to SEI approved by the district. This requirement allows districts to develop an array of programs to meet the diverse needs of students requiring language support.

Although waiver provisions were explained as part of the district's orientation to the new law, and policies for waivers for children under 10 were put in place in the first year, Family Resource Centers (FRCs) and schools were not effective in providing parents with information about their rights to request waivers or about the process to pursue them (Citizens' Commission, 2006). Nor was the district ready to encourage parents to opt out of SEI in order to retain flexibility in the programmatic offerings to students, ${ }^{33}$ as had taken place in other districts (DeJong, Gort, \& Cobb, 2005).

Boston instead continued its practice of requiring parents to "opt out" of all services if they did not want their children to be enrolled in the EL program to which the student was assigned. The "opt out" process required only the parent's signature on a form which was processed at the Family Resource Centers. The parent "opted out" of bilingual education if they were not satisfied with the school placement or were interested in having their child immersed in an English-only classroom. Once a parents' petition to "opt out" was approved, Boston did not test or monitor these students, or provide language support services to them (Tregar, 2008). With the inception of No Child Left Behind and most especially when Question 2 became law, assessment and monitoring of and service provision to all LEPs also became law, making this practice the center of MDESE's complaint against Boston for lack of compliance with state and federal law.
2.2.3 Data Issues. OLLSS was charged with monitoring the identification and assessment of students of limited English proficiency, a responsibility it shared with two other offices: the Office of Research, Assessment and Evaluation (RAE) and the Office of Information Systems (OIS). In the heat of the implementation of Question 2, collaboration faltered and key definitions and data gathering faltered as well. At the center of these issues were conflicts about the criteria for identification and transitioning of LEPs. The conflicts, both among BPS departments and between BPS and the Department of Elementary and Secondary Education, became what some have called "the numbers war."

The district (and OLLSS) and the Department of Elementary and Secondary Education differed in their definitions of who constitutes a student of limited English proficiency. Boston's Bilingual Department (precursor to OLLSS) had traditionally used a broad definition: it defined a LEP as a child whose first language is not English, with a Lau category of A, B, or $\mathrm{C}^{34}$ AND either not meeting one or more ELA competency benchmarks (SAT9 or MCAS, for example) OR enrolled in a bilingual program. The new law—and by extension the Department of Elementary and Secondary Education-operated under a narrower definition: a child whose first language is not English and is unable to perform ordinary classroom work in English. Boston continued to use the broader definition well into the implementation of Question 2.

Since "the LEP count" is the basis for state funding for districts' services to ELs, differences in the definitions of who is to be considered a LEP-differences which pre-dated the implementation of Question 2 but were exacerbated by the new requirements of the lawcreated a conflict with the MDESE, which perceived that Boston (and especially OLLSS) was trying to inflate the number of LEPs in the district in order to receive more federal and state funding. ${ }^{35}$ There were similar problems related to the re-classification of LEPs, with disagreements between Boston and the state in regard to the cut-off scores on the MEPA tests, which called for re-designation, although these issues were later resolved. ${ }^{36}$

Unresolved internal disagreements between the OLLSS, RAE, and OIS regarding the identification of LEPs in the district and the labeling of LEPs in the district's databases added to this conflict with MDESE. Part of BPS's definition of a LEP was a student enrolled in a bilingual program, which also included students who are not LEPs. Therefore, for program purposes, "participation in an EL program" was a more accurate measure of the services being provided. This definition and this form of coding tended to exclude those LEPs who did not participate in bilingual programs. Again, both No Child Left Behind and most especially Question 2 mandated the assessment, monitoring, and service provision to all LEPs-whether or not in a program for ELs. As was explained earlier, Boston did not test or provide language support services to LEPs who were not in EL programs because they had opted out (Tregar, 2008). Under pressure from MDESE, the district accepted the proposal of OLLSS to institute a "LEP code" in its database. This was done in AY2004-2005, improving the identification of these students. ${ }^{37}$
2.2.4 Identification and Assessment of LEPs. Aside from problems with definition, underidentification of LEPs was also an issue during this period. Interviews suggest that underidentification of LEPs took place both because of mis-assessment of students at the Family Resource Centers (FRCs) and because parents withheld information on language use. ${ }^{38}$ The FRCs, BPS' one-stop intake and parent orientation centers for all incoming students, assumed responsibility for the intake and assessment of LEPs when the Multilingual Communication and Placement Center was discontinued in 2001. Education advocates have consistently raised questions about the training of the assessors in the FRCs (Citizens' Commission, 2006, p. 68). Parents were also a source of mis-identification. Interviews suggest that, because of the confusion during the initial deployment of the programs, parents over-reported the use of English in the home in order to avoid having their children designated at LEPs and placed in SEI programs. Both these situations would lead to under-identifying LEP students.
2.2.5 Professional Development of Teachers. Those charged with the implementation of Question 2 in Boston were keenly aware that the successful transition from TBE to SEI depended largely on the capacity of teachers to adapt their instruction to the new demands. TBE—for better or worse-tended to concentrate students and teachers largely away from the bulk of Boston's teaching core; few teachers outside the bilingual program faced instruction with English Learners. With SEI, a larger number of teachers would be called upon to work with English Learners as they exited SEI programs or opted out of them altogether. As LEPs spread through the district's schools, the district came under increasing pressure from the Department of Elementary and Secondary Education to provide services for all LEPs, not just those in SEI programs. As a response, the district declared that "every classroom is an SEI classroom," ${ }^{39}$ that is that any classroom with even one LEP student must meet the standards of an SEI classroom, a policy that only placed more urgency on the professional development of teachers.

In the early years of implementation, a significant amount of the district's-and OLLSS'senergy went to the training of teachers. But the process was not a straight line. The district attempted to address this initially by maintaining TBE students and teachers together in their schools and training TBE teachers in SEI methods. In the summer of 2003, the district trained 140 teachers in SIOP methods, ${ }^{40}$ but the state had not yet decided on its method of instruction and this became a bone of contention between the district and the state. ${ }^{41}$ The district availed itself of the training offered by the Department of Elementary and Secondary Education, but in the first year, only four Boston teachers were admitted to state training programs. ${ }^{42}$ Then the state instituted a "training the trainers" program and Boston participated. In 2004, in an attempt to provide testing to all LEPs across district schools, OLLSS organized the training of four thousand teachers in the administration of MEPA and MELA-0 tests and carried out the testing in the Spring of 2004. Boston used its professional development structure, deploying expert teachers-language acquisition coaches-in schools and charging them with training and mentoring other teachers.

In spite of these efforts, there were institutional barriers to reaching the goal of assuring the quality of instruction and services to ELs. First was the fact that training on SEI was not part of the negotiations between the district and the Boston Teachers Union, nor was it paid for by the district or the schools. The contract with BTU gives the district 20 hours for training, with the content negotiated as part of the contract. Neither the district nor the union ever placed SEI training on the agenda for negotiation. ${ }^{43}$ Because of the magnitude of the expenditure, the leadership of BPS has also not been willing to pay for teacher training independent of the contract. ${ }^{44}$ Some principals have paid to have their teachers trainedand some have trained all their teachers. Others have refused to house SEI classrooms or denied that there were LEPs in their school (possible only because of the deficiencies of the data used for monitoring). ${ }^{45}$ In the end, interviewees reported, training has been based on the good will of teachers. BPS provided training on teachers' "own time" but it was up to individual teachers to decide that this was a training they needed and were willing to take on their own.

In 2006, in a presentation to the Boston City Council, the Deputy Superintendent for Teaching and Learning and the Director of OLLSS reported that in Boston, out of 4,500 teachers requiring training, Category 1 had been earned by 526 teachers, Category 2 by 1,360, Category 3 by 2,129, and Category 4 by 19 (Boston Public Schools, 2006). Only about 20\% of Boston teachers had received the 75 hours of training that, according to the Department of Elementary and Secondary Education and the district, made them qualified to teach English Learners (Boston Public Schools, 2006, p. 2; MDOE, 2003b).

## Trends in Enrollment of English Learners in Boston Public Schools

COLOR KEY
All BPS
NES
NSOL
EP
LEP
In General Ed
In EL Programs

Boston Public Schools experienced a decline of $33.9 \%$ in the identification of students of limited English proficiency in the three years following the implementation of Question 2. This decline appears to be a result of (1) the mis-assessment of students at the Family Resource Centers (FRCs) and (2) parents withholding information on native language and home language use. Because of the decline in LEP identification and inconsistencies in the process of assessment, enrollment in programs for ELs declined by 10.9\%. EL program enrollments at the middle school level suffered the steepest declines.

During the same period, the proportion of LEPs in EL programs who participate in Special Education programs has increased substantially: from $6.6 \%$ to $9.2 \%$ in four years in the case of full or partial inclusion SPED programs and from $4.8 \%$ to $10.9 \%$ in the case of substantially separate SPED programs.

LEP students in BPS have experienced a narrowing of available services because (1) LEPs in EL programs have experienced increasing concentration in the "default" SEI program; (2) LEPs enrolled in General Education programs do not receive language services and they are also not tested and monitored as required by both federal and state law; and (3) BPS has not pursued the process of parental "waivers" of participation in SEI programs as a way to expand program offerings for EL students in Boston.

One of the key findings of this study of English Learners is enrollment patterns of English Learners changed as the implementation of Question 2 evolved in Boston. This section introduces the population of students of the Boston Public Schools seen through the prism of language and explores the trends in the enrollment of these populations, examining the changes from AY2003 to AY2006. From this perspective, native language, English proficiency, and the participation in programs for language acquisition and support are the key demarcations. Figure 3, already presented in our introduction, serves as a guide to our understanding of the relationships among the different sub-populations. The figure is drawn to roughly represent the true numerical proportions of these populations in BPS.
"Native language" is the first divider. Throughout the four years of our observation, about $60 \%$ of BPS students were native English speakers; $40 \%$ were native speakers of other languages.

Figure 3. Enrollment Defined by Native Language, English Language Proficiency, and Selected Program Participation. Boston Public Schools, AY2006

| Total | All BPS |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Native Language | NES | NSOL | LEP |  |
| Language <br> Proficiency | EP | EP |  |  |
| Program <br> Participation | In General Education | In General Education | In Gen Ed | In EL <br> Programs |

Table 2. Enrollment. Selected Populations. Boston Public Schools, AY2003-AY2006

|  | AY2003 | AY2004 | AY2005 | AY2006 |
| :--- | :--- | :--- | :--- | :--- |
| A. BPS ${ }^{\mathbf{1}}$ | 63,777 | 61,652 | 59,608 | 59,211 |
| B. NSOL $^{2}$ | 27,149 | 25,695 | 24,751 | 24,421 |
| C. LEP $^{2}$ | 14,720 | 10,005 | 8,413 | 9,726 |
| D. In EL Programs | 9,667 | 5,992 | 5,532 | 8,614 |

Notes: (1) Enrollments do not match official BPS enrollments because of exclusions, see Appendix 1. (2) The count of LEP students presented here does not include a small group of students who are designated as LEP by the BPS data, but who are native English speakers. These students amounted to 17 in AY2003, 21 in AY2004, 45 in AY2005 and 263 in AY2006.

We next turn our focus to the population of native speakers of languages other than English (NSOL). Massachusetts General Laws c. 71A define "English Learner" as "a child whose native language is not English and who is not currently able to perform ordinary class work in English" (MDOE, 2004). This is the same definition as it offers for "student of Limited English Proficiency." Thus, since "native language" is the first criterion in Massachusetts' definition of who constitutes a student of limited English proficiency, it too serves as the basis for our demarcation by language proficiency. Throughout most of the period of observation, the majority of NSOL students were determined to be proficient in English, although they speak it as a second language; these students were also determined to be capable of doing schoolwork in English. These bilingual NSOL students may have entered BPS as English speakers (although they were native speakers of another language) or may have transitioned from bilingual education programs and no longer classified as LEPs.

The last row represents the programs in which BPS students are enrolled when only language is taken into account; that is, it represents students attending a General Education program or a program for English Learners. The five top language groups among Boston students in EL programs are Spanish, Chinese, Haitian Creole, Vietnamese, and Cape Verdean Creole; the second report in this publication focuses on the outcomes of native speakers from each of these groups in EL programs and those in General Education.

The groups in the last row also shed light on the distribution of BPS students by language background and major program. In 2006, of the 59,211 students enrolled in BPS, 8,614 ( $14.5 \%$, rust) were students of limited English proficiency enrolled in programs for English Learners. But the diversity of language background among the population enrolled in General Education programs ( 50,597 or $85.5 \%$ of BPS enrollments) is also notable. Among students enrolled in General Education:

- 34,790 ( $68.8 \%$ ) were native English speakers (light green)
- $14,695(29.0 \%)$ were students who spoke English as a second language, that is, they were native speakers of languages other than English who were determined capable of class work in English (EP) (dark blue);
- 1,112 (2.2\%) were LEP students in General Education programs (tan).

In examining each population, we present the changes in enrollment observed over the four-year period followed by the demographic characteristics of the groups.

## 1. Enrollment of Native Speakers of Languages Other than English (NSOL)

Boston Public Schools is the largest district in Massachusetts, educating about 6\% of the students in the state (Sable and Hoffman, 2006). During the period of the study, from AY 2003 to AY2006, the total district enrollment declined by 7.2\%, from 63,777 to 59,211 students (Table 2, A). The greatest decreases in enrollment occurred at the elementary and middle levels; high school enrollments increased (Table 3, D).

Throughout the period, NSOL enrollments followed a similar pattern. NSOL enrollments decreased in both actual numbers and as a proportion of BPS enrollments (Tables 2, B and $3, A)$. The proportion of NSOL students at both the elementary and middle school levels also decreased between AY2003 and AY2006, but the proportion of NSOL students at the high school level increased in the same period (Table 3, D).

Table 3. Enrollment of NSOL Students. Selected Populations. Boston Public Schools, AY2003-AY2006

|  | AY2003 | AY2004 | AY2005 | AY2006 |
| ---: | :--- | :--- | :--- | :--- |
| A. NSOL as \% of BPS Enrollment | $42.6 \%$ | $41.7 \%$ | $41.5 \%$ | $41.2 \%$ |
| B. Percent Change in Enrollment | AY2003-2004 | AY2003-2005 | AY2003-2006 |  |
|  | BPS | $-3.3 \%$ | $-6.5 \%$ | $-7.2 \%$ |
| NSOL | $-5.4 \%$ | $-8.8 \%$ | $-10.0 \%$ |  |
| C. Native Language Groups |  |  |  |  |
| (\% BPS Enrollment) | AY2003 | AY2004 | AY2005 | AY2006 |
| English | $57.4 \%$ | $58.3 \%$ | $58.5 \%$ | $58.8 \%$ |
| Spanish | $20.3 \%$ | $20.6 \%$ | $21.0 \%$ | $21.2 \%$ |
| Haitian Creole | $3.9 \%$ | $3.8 \%$ | $3.7 \%$ | $3.6 \%$ |
| Chinese | $3.3 \%$ | $3.3 \%$ | $3.4 \%$ | $3.5 \%$ |
| Vietnamese | $2.9 \%$ | $2.7 \%$ | $2.6 \%$ | $2.5 \%$ |
| Cape Verdean Creole | $2.7 \%$ | $2.5 \%$ | $2.4 \%$ | $2.4 \%$ |
| Other languages | $9.5 \%$ | $8.8 \%$ | $8.4 \%$ | $8.0 \%$ |
| D. Enrollment by Grade Level |  |  |  |  |
| BPS Elementary School | $46.0 \%$ | $45.0 \%$ | $44.3 \%$ | $44.4 \%$ |
| BPS Middle School | $24.0 \%$ | $23.6 \%$ | $23.0 \%$ | $22.4 \%$ |
| BPS High School | $30.0 \%$ | $31.4 \%$ | $32.7 \%$ | $33.2 \%$ |
| NSOL Elementary School | $45.9 \%$ | $44.2 \%$ | $43.3 \%$ | $43.4 \%$ |
| NSOL Middle School | $23.1 \%$ | $22.4 \%$ | $21.8 \%$ | $21.4 \%$ |
| NSOL High School | $31.0 \%$ | $33.4 \%$ | $34.9 \%$ | $35.2 \%$ |

NSOL students are native speakers of many of the world languages. In AY2006, English was the native language of $58.8 \%$ of BPS students, an increase from $57.4 \%$ in AY2003 (Table $3, C)$. Spanish was the native language of the second largest group of students; $21.2 \%$ of BPS students were native speakers of Spanish in AY2006, and their numbers also increased slightly from AY2003. Native speakers of Haitian Creole were the third largest native language group, but their proportion decreased from 3.9\% in AY2003 to 3.6\% in AY2006. The proportion of speakers of Chinese dialects also increased from $3.3 \%$ in AY2003 to $3.5 \%$ in AY2005. Finally, two other groups composed the five top native language cohorts in BPS: Vietnamese and Cape Verdean Creole. The proportions were both under 3\% throughout the period and decreased over the four years of observation. Other languages spoken by NSOL students declined from $9.5 \%$ to $8.0 \%$ during the period. The second part of this publication focuses on the enrollment, demographic characteristics, program participation, and academic outcomes of the top five groups of native speakers of languages other than English.

## 2. Enrollment of Students of Limited English Proficiency

Between AY2003 and AY2006, the identification of students of limited English proficiency decreased from 14,720 to 9,726 students (Table 1, C). The proportion of students identified as having limited English proficiency declined for two years, rising again in AY2006 but never reaching as high a level as in the initial year of the observation (Table 4, A). The net decline in the number of BPS students identified as LEP was 33.9\% (Table 4, D). Among students who are native speakers of languages other than English, the proportion of LEP students declined from $54.2 \%$ in AY2003 to $39.8 \%$ in AY2006 (Table 4, B). This decline of $33.9 \%$ takes place in the context of the declines of about $10 \%$ in the enrollments of NSOL students in the district (Tables 3, B \& 4, C).

Table 4. Enrollment of Students of Limited English Proficiency. Selected Populations. Boston Public Schools, AY2003-AY2006

|  | AY2003 | AY2004 | AY2005 | AY2006 |
| ---: | :--- | :--- | :--- | :--- |
| A. \% of BPS Enrollment Identified <br> as LEP | $23.1 \%$ | $16.2 \%$ | $14.1 \%$ | $16.4 \%$ |
| B. \% of NSOL Identified as LEP | $54.2 \%$ | $38.9 \%$ | $34.0 \%$ | $39.8 \%$ |
| C. Percent Change in LEP <br> Identification |  | AY2003-2004 | AY2003-2005 | AY2003-2006 |
| Of BPS |  | $-32.0 \%$ | $-42.8 \%$ | $-33.9 \%$ |
| In Elementary School |  | $-22.2 \%$ | $-29.5 \%$ | $-16.3 \%$ |
| In Middle School |  | $-42.4 \%$ | $-54.5 \%$ | $-47.2 \%$ |
| In High School |  | $-40.4 \%$ | $-55.4 \%$ | $-51.5 \%$ |
|  | AY2003 | AY2004 | AY2005 | AY2006 |
| D. LEP Enrollment by |  | $54.7 \%$ | $59.0 \%$ | $60.6 \%$ |
| Grade Level | In Elementary School | $47.8 \%$ | $14.4 \%$ | $13.5 \%$ |
| In Middle School | $17.0 \%$ | $30.9 \%$ | $27.5 \%$ | $25.8 \%$ |
| In High School | $35.2 \%$ |  |  |  |

The pattern of decline in the LEP enrollments varied across grade levels. The proportion at the elementary level increased from $47.8 \%$ in AY2003 to $60.6 \%$ in AY2006 (Table 4, D). This increase took place in the context of relatively stable overall elementary enrollments, suggesting that LEP students are becoming more prevalent in the enrollment at the elementary level. But in terms of absolute numbers over time, the enrollment of LEP students in elementary school actually decreased by $16.3 \%$ in the period of observation.

The proportion of LEPs in both the middle and high school levels decreased. The decrease was most salient in high school, where the percent of LEPs decreased from 35.2\% to $25.8 \%$ between AY2003 to AY2006; this represented a decline of 51.5\% (Table 4, C and D). In both middle school and high school, there was a continuous decline across the four years (with a minimal recovery in middle school enrollments in AY2006). The decline in middle school enrollments in this population happened in a context of declining enrollments at this level in the district. The reverse was true in the case of LEP high school enrollments, where the decline in LEP enrollments took place in the context of the expansion of enrollments at this level in the district, signaling that LEPs were becoming a smaller cohort within this population.

The dimension and pervasiveness of the decline in LEP identification is one of the salient findings of this study of ELs in Boston post-Question 2. Given the much lesser decline in NSOL enrollments, the decline in LEPs cannot be attributed solely to declines in this population. Problems with the consistency in the coding of LEPs, reviewed in the implementation section of this report, may also affect the representation of LEPs in the data examined here, but not to the extent exhibited by the decline in LEPs for the district. Evidence of this is the fact that after AY2005, when the district addressed proactively its data problems by integrating a consistent "LEP code" to the district's database, the numbers of LEPs identified remained well below the numbers identified in AY2003.

Interviews and documentary review point to other institutional factors that may be related to the decline in LEP identification. Specifically they point to mis-identification because of (1) the mis-assessment of students at the Family Resource Centers (FRCs) and (2) parents withholding information on native language and language use. The Family Resource Centers are BPS' one-stop enrollment and assessment center. Their assessments of English proficiency were based on listening and speaking tests and not the complete battery of testing, which includes reading and writing assessments. ${ }^{46}$ This would tend to under-identify students not capable of classroom work in English, which requires reading and writing skills that NSOL students, even those with strong verbal English ability, may not possess. In AY2004, the Newcomer Center was developed and charged with the assessment of high school students, but FRCs continued to conduct assessments for middle school and elementary school students through the observation period.

Parents were also a source of mis-identification. Interviews suggest that, because of the confusion during the initial implementation of the language programs, parents over-reported the use of English in the home in order to avoid having their children designated as LEP students and placed in SEI programs. Both these situations would lead to under-identifying LEP students. ${ }^{47}$

## 3. Participation of Students of Limited English Proficiency in BPS Programs

Students of limited English proficiency are enrolled in programs for English Learners and in General Education programs in BPS. The process of assignment involves the assessment of a student's English ability as well as the assignment to a program for English Learners. Once assessed to be eligible for these programs, students can be assigned to the "default" program two-way or literacy programs. But LEP students are also found in General Education programs as they transition from programs for English Learners, or if their parents "opt out" of their children's participation in these programs. Across the four years of observation, LEPs enrolled most frequently in programs for English Learners.

In this section we explore the enrollment of limited English proficiency students in programs for English Learners and in General Education programs. We end with a presentation of their participation in Special Education programs.

Table 5. Enrollment of Students of Limited English Proficiency. Boston Public Schools, AY2003-AY2006

|  | AY2003 | AY2004 | AY2005 | AY2006 |
| :--- | :--- | :--- | :--- | :--- |
| A. LEP | 14,720 | 10,005 | 8,413 | 9,726 |
| B. In General Ed | 5,053 | 4,013 | 2,881 | 1,112 |
| C. In EL Programs | 9,667 | 5,992 | 5,532 | 8,614 |

### 3.1 Participation in Programs for English Learners

The participation of students of limited English proficiency in programs for English Learners declined from 9,667 students in AY2003 to 8,614 students in AY2006, a decline of 10.9\% (Table 5, C). The decline in the proportion of students enrolled in EL programs followed a similar pattern to that observed previously, that is, a swift decline in the first two years of implementation, followed by a recovery in the third that did not reach the level of enrollment observed in the baseline period (Table 6, A). By AY2006, $88.6 \%$ of LEPs were enrolled in EL programs, compared to $65.7 \%$ in AY2003 (Table 6, B). This increase signals an improved process of placement on the part of BPS. The enrollments in EL programs in elementary schools and high schools increased to the greatest extent (Table 6, B). But numerically, all levels suffered a decline (Table 6, C).

Table 6. Enrollment in Programs for English Learners. Selected Populations. Boston Public Schools, AY2003-AY2006

|  | AY2003 | AY2004 | AY2005 | AY2006 |
| :--- | :--- | :--- | :--- | :--- |
| A. EL Program Enrollment as a |  |  |  |  |
| \% of BPS | $15.2 \%$ | $9.7 \%$ | $9.3 \%$ | $14.5 \%$ |
| \% of NSOL | $35.6 \%$ | $23.3 \%$ | $22.4 \%$ | $35.3 \%$ |
| \% of LEP | $65.7 \%$ | $59.9 \%$ | $65.8 \%$ | $88.6 \%$ |
| B. EL Program Enrollment by <br> Grade Level |  |  |  |  |
| In Elementary School | $53.3 \%$ | $56.7 \%$ | $54.8 \%$ | $58.5 \%$ |
| In Middle School | $18.8 \%$ | $16.2 \%$ | $14.9 \%$ | $13.6 \%$ |
| In High School | $27.9 \%$ | $27.2 \%$ | $30.4 \%$ | $27.9 \%$ |
| C. Percent Change in EL |  | AY2003-2004 | AY2003-2005 | AY2003-2006 |
| Program Enrollment |  | $-38.0 \%$ | $-42.8 \%$ | $-10.9 \%$ |
| Olementary School |  | $-34.1 \%$ | $-41.2 \%$ | $-2.2 \%$ |
| Middle School |  | $-46.6 \%$ | $-54.6 \%$ | $-35.6 \%$ |
| High School |  | $-39.7 \%$ | $-37.8 \%$ | $-10.9 \%$ |
| H |  |  |  |  |

Interview and documentary data point to several factors for the overall decline in enrollments. The first was the policy decision made by BPS early in the planning for the implementation of Question 2 which called for the transition to General Education programs of over 4,366 TBE students in Levels 3, 4, and 5 (Boston Public Schools, 2006). This decision resulted in a swift drop of $38 \%$ in the number of students enrolled in EL programs. The ongoing problems with the identification and assessment of LEP students maintained an under-identification of students eligible for EL programs and likely had an impact on the under-enrollment in these programs.
3.1.1 Enrollment in Specific Programs. As noted above, 4,366 TBE students (45.2\% the EL enrollment in AY2003) were swiftly transitioned at the start of the process of implementation. The remaining TBE students initially stayed in the same schools, as did their teachers, and their TBE classrooms became sheltered immersion classrooms. The objective of this plan was to minimize the disruption of the program changes for the students (Boston Public Schools, n.d.-b). These schools, then, tended to cluster students of the same language group, and eventually were designated as "Centers for English Language Learning (Boston Public Schools, n.d.-b). Other students attended schools that had small programs for English Learners which in some cases clustered students in language specific SEI classes and in others in multicultural/ multilingual SEI classes (Boston Public Schools, n.d.-a). The former, the preferred approach, clustered students of the same language group; although the instruction takes place in English, the native language can be used for support. In the latter, students of different languages were in the same class and the instruction took place in English.

Table 7. Enrollment of Students of Limited English Proficiency in Specific Programs. Selected Populations. Boston Public Schools, AY2003-AY2006

|  | AY2003 | AY2004 | AY2005 | AY2006 |
| ---: | :--- | :--- | :--- | :--- |
| A. In General Education / Opt Out ${ }^{2}$ | $5,053^{3}$ | 4,013 | 2,881 | 1,112 |
| B. In Programs for ELs | 9,667 | 5,992 | 5,532 | 8,614 |
| Transitional Bilingual Education | $95.4 \%^{1}$ | - | - | - |
| ESL/English Language Support | $4.6 \%$ | - | - | - |
| Sheltered English Immersion | - | $86.8 \%$ | $92.5 \%$ | $95.4 \%$ |
| Two-Way Bilingual / Immersion Programs | - | $4.6 \%$ | $4.3 \%$ | $3.2 \%$ |
| Other Bilingual Programs | - | $8.6 \%$ | $3.1 \%$ | $1.4 \%$ |

Notes: (1) Available data did not allow for the further disaggregation of programs in AY2003; total is for the combination of TBE and Two-Way Bilingual programs. (2) Includes Opt Outs and other LEP students in General Education programs. For disaggregation see Table 9. (3) In AY2003, BPS labels as "waivers" those included here as "opt outs."

Table 7 shows the distribution of enrollments across the specific EL programs offered in BPS. The transition between TBE and SEI has meant a re-definition of programs, as appear in the listing in the table. In AY2003, students were distributed among TBE/Two-Way Bilingual and ESL programs; TBE/Two-Way housed $95.4 \%$ of LEPs in programs for ELs (Table 7, B). In addition, language support services (such as small group instruction, mentoring, or counseling) were provided to transitioning students in General Education.

Between AY2003 and AY2006, TBE programs were replaced by SEI programs as the "default" for BPS students of limited English proficiency. Over time, SEI replaced both two-way immersion programs and other bilingual programs, and by AY2006, 95.4\% of the LEP enrollments were in SEI programs alone (Table 7, B). Unlike the situation of LEPs in General Education Programs under TBE, no services are provided for these students under SEI (Tregar, 2008). This shift represents a decline in the amount and type of services available to ELs in Boston, as more and more students are concentrated in one program, Sheltered English Immersion.

### 3.1.2 Grade Level Enrollment. Elementary school students under TBE were distributed

 between TBE, two-way programs, and ESL and language support programs. After 2004, there was a strong movement into SEI programs until $94.6 \%$ of the ELs in elementary school were under this model (Table 8, A). The proportion in both two-way and other bilingual programs declined in the implementation period. In middle school, ELs attended both TBE and twoway programs in AY2003. After Question 2, there was a rapid rise in the proportion attending SEI programs and a rapid decline in those involved in "other bilingual" programs, though the proportion in two-way programs increased slightly. By AY2006, 95.8\% of EL students in middle school were in SEI programs (Table 8, B). The level of concentration in SEI programs was highest in high schools, where in AY2006 it reached $97.0 \%$ (Table 8, C).Table 8. Enrollment in Programs for English Language Learners by Grade Level. Boston Public Schools, AY2003-AY2006

|  | AY2003 | AY2004 | AY2005 | AY2006 |
| :---: | :---: | :---: | :---: | :---: |
| Elementary School |  |  |  |  |
| A. In General Education / Opt Outs ${ }^{2}$ | $1,886^{3}$ | 2,080 | 1,932 | 852 |
| B. In Programs for ELs |  |  |  |  |
| Transitional Bilingual and Two-Way Bilingual | 97.0\% ${ }^{1}$ | - | - | - |
| ESL/English Language Support | 3.0\% | - | - | - |
| Sheltered English Immersion | - | 90.5\% | 92.1\% | 94.6\% |
| Two-Way Immersion Programs | - | 8.0\% | 7.9\% | 5.4\% |
| Other Bilingual Programs | - | 1.5\% | 0.1\% | - |
| Middle School |  |  |  |  |
| A. In General Education / Opt Outs ${ }^{2}$ | $686^{3}$ | 473 | 315 | 153 |
| B. In Programs for Els |  |  |  |  |
| Transitional Bilingual and Two-Way Bilingual | $94.9 \%^{1}$ | - | - | - |
| ESL/English Language Support | 5.1\% | - | - | - |
| Sheltered English Immersion | - | 75.4\% | 93.8\% | 95.8\% |
| Two-way Immersion Programs | - | 0.3\% | 0.1\% | 0.3\% |
| Other Bilingual Programs | - | 24.3\% | 6.1\% | 3.9\% |
| High School |  |  |  |  |
| A. In General Education / Opt Outs ${ }^{\mathbf{2}}$ | 2,481 ${ }^{3}$ | 1,460 | 634 | 107 |
| B. In Programs for ELs |  |  |  |  |
| Transitional Bilingual and Two-Way Bilingual | 92.7\% ${ }^{1}$ | - | - | - |
| ESL/English Language Support | 7.3\% | - | - | - |
| Sheltered English Immersion | - | 85.9\% | 92.7\% | 97.0\% |
| Other Bilingual Programs | - | 14.1\% | 7.3\% | 3.0\% |

Notes: (1) Available data did not allow for the further disaggregation of programs in AY2003; total is for the combination of TBE and Two-Way Bilingual programs. (2) Includes Opt Outs and other LEP students in General Education programs. For disaggregation see Table 9. (3) In AY2003, BPS labels as "waivers" those included here as "opt outs."

### 3.2 Participation in General Education Programs

By definition, a student of limited English proficiency is not able to perform classroom work in English. Nevertheless a sizeable number of LEPs are in General Education programs. LEPs in General Education programs are students who have transitioned from bilingual education or SEI programs, or, according to interviews conducted for this study, have "opted out" of language programs through the special process created by BPS for this purpose. These students and their situation in General Education are at the center of the districts "numbers wars" as well as of MDESE's concerns about the district's compliance with federal and state law.

Table 9. Enrollment of Students of Limited English Proficiency in General Education. Boston Public Schools, AY2003-AY2006

|  | AY2003 | AY2004 | AY2005 | AY2006 |
| :---: | :---: | :---: | :---: | :---: |
| A. LEP Enrollment in General Education | 5,053 | 4,013 | 2,881 | 1,112 |
| B. Opted Out of EL Programs ${ }^{1}$ | 2,668 | 419 | 117 | 1,112 |
| C. Opt Outs as Percent of LEP | 18.1\% | 4.2\% | 1.4\% | 11.4\% |
| D. Opt Outs as Percent of LEP in General Education | 52.8\% | 10.4\% | 4.1\% | 100.0\% |
| E. LEP Enrollments in General Education by Grade Level |  |  |  |  |
| Elementary School | 1,886 | 2,080 | 1,932 | 852 |
| \% Opt Outs | 14\% | 6.6\% | 5.1\% | 100\% |
| Middle School | 686 | 473 | 315 | 153 |
| \% Opt Outs | 100\% | 15.6\% | 1.9\% | 100\% |
| High School | 2,481 | 1460 | 634 | 107 |
| \% Opt Outs | 69.2\% | 14.2\% | 1.9\% | 100\% |

Note: (1) BPS labels as "waivers" those listed here as "opted out" In AY 2003. For all other years they are listed as "opt outs" in the BPS data.

In AY2003, 5,053 or $18.1 \%$ of all LEPs were enrolled in a General Education program (Table 9, A and C). Of these, $47 \%$ were students who had retained their LEP status after transitioning to General Education because they required support services such as tutoring, small group instruction, mentoring, or counseling, which were provided. The remaining $53 \%$ were students whose parents had signed a release form "waiving" their child's rights to bilingual education programs and releasing BPS from the responsibility of providing services to their children. In many cases, these were parents who preferred an immersion model of English acquisition for their children. In others, parents were not satisfied with the school assignments and "waived" their children's participation in an EL program in order to retain the flexibility of choosing the school their child would attend. The number of LEPs in General Education decreased steadily over the four-year period.

The number of students who have opted out of EL programs decreased from a high of 2,668 in AY2003 to a low of 117 in AY2005, settling on 1,112 by AY2006 (Table 9, B)..$^{48}$ The pattern of "opt outs" is similar to that of other enrollments discussed here: the proportion of LEP enrollments in General Education represented by students who have "opted out" of language support programs first declined precipitously—from $52.8 \%$ to $4.1 \%$ —only to increase to $100 \%$ by AY2006, when every LEP student in General Education was a student who had opted out of EL programs (Table 9, C). In 2005, 1.4\% of LEP students (all eligible to attend EL programs) had opted out of them; this proportion had risen to $11.4 \%$ in AY2006. In contrast, the "opt out" rate among LEPs statewide in AY2006 was 5.5\% (MDOE, 2005).
In general, younger students were more likely to be enrolled in a program for ELs. Older students were more likely to "opt out." In the first two years, high school students had the largest rate of "opting out" and/or attending General Education programs; this reversed in AY2005 and AY2006, when high schoolers showed the lowest levels.

### 3.2.1 Confusion over Opting Out and Parental Waivers from SEI. There is still significant

 confusion about the process, extent, and meaning of "opting out" in Boston and the relation it bears to parent's legally guaranteed right to request waivers from participation in SEI programs. For one, Boston's "opt out" is often confused with the process of "waivers" whichparents have a right to request under the law and which came into effect as a result of Question 2. Parental "opting out" (called "waiver" in the BPS data for AY2003 in this study) was permitted in Boston under the 1971 Chapter 71A Bilingual Education Law and required only the signature of a form by the parent in which the parent opts out of all language services for their child and absolves BPS of any responsibility to provide them. Parents often took this option when the school to which their child was assigned was not acceptable or when a parent preferred immersion as method for their child. "Opting out" meant that students were not entitled to any services. But the 2002 change to Chapter 71A, done as a consequence of Question 2, includes a process of parental request of a "waiver" from participation in the SEI programs. The "waiver" process only "waives" students from SEI and does not disqualify them for services or exempt them from testing or monitoring, required both by the state law and by the federal law No Child Left Behind law, even though they may be in a General Education program. Boston does not provide services to these students (Tregar 2008; MDESE, 2008a) although by both federal and state law their rights to these services continue whether they are enrolled in EL programs or in programs in General Education.

Another difference between parents' right to "waive" their children's participation in SEI and "opting out" of the type instituted in BPS is the process by which they are considered and approved. The "opt out" release forms are filled out by parents and approved by staff of the Family Resource Centers, usually because either a parent is dissatisfied with the school in which their child is placed or wishes to immerse their child swiftly into an English-only classroom. This process, taking place at the Family Resource Centers, continues to the present (MDESE, 2008a).

Under Question 2, there is no "opt out" process, but rather a "waiver" process, whereby parents are required to keep their child in the program for 30 days and then submit a "waiver" request to the principal or headmaster, who decides in the case of waivers of students above 10 years of age (Commonwealth of Massachusetts, 2002). In the case of students under 10 years of age, the request should be approved by the Superintendent. Students whose parents' waiver requests are approved are then allowed to attend another type of language support program (Two-Way, Literacy, TBE, etc) available in the district.

In sum, in the time period covered by this study, the process of "opting out" and the process of "waivers" appear conflated. The confusion results (1) in a reduction in the rights of Boston's parents to request a different model of language instruction for their children and (2) in the concentration of students in SEI programs as the district declines to use the "waiver" process allowed by law to develop a more varied range of programs for ELs in BPS. At this point in time, without a proactive use of the waiver process to create opportunities for more types of programs, the programmatic offerings for English Learners enrolled in BPS are few.

### 3.3 Participation in Special Education Programs

The overall trend in enrollment in SPED programs in BPS shows a very slight decrease in the enrollment in full or partial inclusion programs and an increase in the enrollment in substantially separate programs during the period of AY2003 and AY2006. This pattern is replicated in the enrollments of native English speakers, although both the increase and the decrease are slightly larger.

Table 10. Participation in Special Education Programs. Selected Sub-Populations. Boston Public Schools, AY2003-AY2006

|  | AY2003 | AY2004 | AY2005 | AY2006 |
| :---: | :---: | :---: | :---: | :---: |
| All BPS |  |  |  |  |
| Full or Partial Inclusion | 10.5\% | 9.8\% | 10.4\% | 10.4\% |
| Substantially Separate | 7.9\% | 8.6\% | 8.7\% | 8.8\% |
| NES |  |  |  |  |
| Full or Partial Inclusion | 12.4\% | 11.3\% | 11.9\% | 11.8\% |
| Substantially Separate | 9.7\% | 10.2\% | 10.2\% | 10.2\% |
| NSOL |  |  |  |  |
| Full or Partial Inclusion | 8.0\% | 7.7\% | 8.3\% | 8.5\% |
| Substantially Separate | 5.4\% | 6.3\% | 6.6\% | 6.7\% |
| NSOL EPs |  |  |  |  |
| Full or Partial Inclusion | 7.6\% | 7.8\% | 8.1\% | 8.0\% |
| Substantially Separate | 3.5\% | 3.8\% | 4.1\% | 4.2\% |
| NSOL LEPs |  |  |  |  |
| Full or Partial Inclusion | 8.3\% | 7.5\% | 8.6\% | 9.1\% |
| Substantially Separate | 7.0\% | 10.3\% | 11.6\% | 10.4\% |
| LEPs in General Education |  |  |  |  |
| Full or Partial Inclusion | 11.3\% | 11.3\% | 10.8\% | 10.7\% |
| Substantially Separate | 8.4\% | 8.8\% | 8.9\% | 8.4\% |
| LEPs in Programs for ELs |  |  |  |  |
| Full or Partial Inclusion | 6.6\% | 5.8\% | 6.2\% | 9.2\% |
| Substantially Separate | 4.8\% | 6.7\% | 6.8\% | 10.9\% |

But once one focuses on native speakers of other languages in BPS, the pattern is quite different. Across the four years, there were increases in the participation in full/partial inclusion and in substantially separate SPED programs by NSOL students. Even more salient are the changes among LEP students. The four years show increase in the proportion of both EPs and LEPs in SPED programs but the increase in the proportion of LEPs, particularly in substantially separate SPED programs is significant, moving from $7.0 \%$ to $10.4 \%$ in the four years of observation. The proportion of LEPs in EL programs who participate in SPED has increased substantially: from $6.6 \%$ to $9.2 \%$ in four years in the case of full or partial inclusion SPED programs and from $4.8 \%$ to $10.9 \%$ in the case of substantially separate SPED programs. Conversely, the proportion of LEP students in General Education who attended full or partial inclusion or substantially separate SPED programs remained fairly steady across the four years, hovering around $11 \%$ and $8 \%$, respectively.

# Trends in the Demographic Characteristics of Populations Defined by Language in Boston Public Schools 

## COLOR KEY

All BPS
NES
NSOL
EP
LEP
In General Ed
In EL Programs

In order to understand any changes in outcomes of the populations studied later in this report, it was necessary to understand whether or not the populations experienced changes in their characteristics, by gender, race/ethnicity, poverty status, or native language. There were some changes over time in some of the populations, and there were distinct differences among populations:

- Native speakers of languages other than English (NSOLs) have higher rates of receiving free or reduced price lunch than native English speakers (NES); among NSOLs, students of limited English proficiency had higher rates of receiving free or reduced price lunch than those who are English proficient.
- NSOL students were disproportionately Asian and Latino. Latinos comprised more than half of all NSOL students each year, while Asians comprised about $17 \%$.
- Among LEP students, there was an increase in the Black and Latino populations.
- The proportion of male LEP students in EL programs increased, from $50.6 \%$ in AY2003 to 53.4\% in AY2006.
- There was a decrease in the proportion of LEP students in EL programs receiving free or reduced price lunch, from 89.9\% in AY2003 to 84.8\% in AY2006.

These population differences and changes were important to examine and document; however, they do not contribute greatly to explanations for the changes in outcomes for English Learners seen in this report.

This section addresses the question: How have the demographic characteristics of students participating in programs for English Learners changed in this time period? ${ }^{49}$ by presenting basic demographic information for the populations defined by native language and English proficiency as well as those populations defined by their participation in programs for English Learners. It addresses first the comparison between native English speakers (NES students) and speakers of languages other than English (NSOL students) (Table 11), followed by a discussion of the characteristics of the NSOL students who are of limited English proficiency (LEP) and those who are proficient in English (EP) (Table 12). Finally, the sections presents the characteristics of LEPs enrolled in programs for English Learners and those enrolled in General Education (Table 13). Additional demographic analyses, this time for the five largest native language groups other than English speakers, appear in the second report which is part of this publication.

## 1. The Characteristics of Native Speakers of English and of Languages Other than English

In general, the demographics of the overall BPS population have been stable in terms of gender and poverty status. Just over $51 \%$ have been male and the poverty rate in Boston Public Schools hovers around $75 \%$. In this study, the poverty rate is underestimated since we were limited to using "receiving free or reduced price lunch" rather than "eligible to receive free or reduced price lunch," which is a more accurate indicator of the prevalence of poverty. The greatest proportion of students each year received free or reduced price lunch at the elementary level, followed by middle and high school levels, reflecting an under-reporting of eligibility at the higher grades.

The proportion of native speakers of languages other than English has hovered steadily around $41 \%$. The most salient changes in the demography of BPS students have taken place in the racial composition of the students and in the proportion of students designated as being limited in their English proficiency. In the case of the changing racial composition of the population, the period showed declining proportions of white and Black populations, a stable Asian population, and a rising population of Latino students. In terms of English proficiency, the data show that the proportion of students of limited English proficiency declined in the period. Within the two populations defined by native language-NES and NSOL students-the proportion of males was higher among NES than among NSOL students, although it was slightly declining in the former and slightly rising in the latter. There were also differences in the rate of use of free or reduced price lunches: rates were up to 13 percentage points higher among NSOL students than among NES students. These differences have held steady during the period. By race, NSOL students were disproportionately Asian and Latino. Latinos comprised more than half of all NSOL students each year, while Asians comprised about 17\%.

Table 11. Demographic Profile of Total BPS Enrollment, of Native English Speakers, and of Native Speakers of Other Languages. Boston Public School, AY2003-AY2006

|  | AY2003 |  |  | AY2004 |  |  | AY2005 |  |  | AY2006 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | All BPS | NES | NSOL | All BPS | NES | NSOL | All BPS | NES | NSOL | All BPS | NES | NSOL |
| A. Enrollment | 63,777 | 36,628 | 27,149 | 61,652 | 35,957 | 25,695 | 59.608 | 34,857 | 24,751 | 59,211 | 34,790 | 24,421 |
| B. Gender (\% male) | 51.4\% | 52.2\% | 50.4\% | 51.4\% | 52.0\% | 50.5\% | 51.2\% | 51.8\% | 50.5\% | 51.2\% | 51.6\% | 50.7\% |
| C. Poverty Status (receiving free or reduced price lunch) | 75.9\% | 70.2 | 83.6 | 74.8\% | 69.7\% | 81.9\% | 75.7\% | 70.7\% | 82.9\% | 74.9\% | 70.2\% | 81.8\% |
| D. Race/Ethnicity |  |  |  |  |  |  |  |  |  |  |  |  |
| Asian/Pacific Islander | 8.7\% | 2.4\% | 17.3\% | 8.8\% | 2.8\% | 17.1\% | 8.8\% | 2.9\% | 17.0\% | 8.7\% | 2.9\% | 16.9\% |
| Black | 47.1\% | 63.7\% | 24.6\% | 46.2\% | 62.1\% | 23.9\% | 45.6\% | 61.3\% | 23.4\% | 44.3\% | 59.6\% | 22.7\% |
| Latino | 29.6\% | 14.0\% | 50.7\% | 30.7\% | 15.4\% | 52.2\% | 31.3\% | 16.0\% | 53.0\% | 32.8\% | 17.9\% | 54.1\% |
| White | 14.2\% | 19.3\% | 7.2\% | 13.9\% | 19.1\% | 6.7\% | 13.9\% | 19.2\% | 6.4\% | 13.8\% | 19.0\% | 6.3\% |
| E. Native Language Other Than English | 42.6\% | 0\% | 100\% | 41.7\% | 0\% | 100\% | 41.5\% | 0\% | 100\% | 41.2\% | 0\% | 100\% |
| F. Limited English Proficient | 23.1\% | 0\% | 54.2\% | 16.3\% | 0.1\% | 38.9\% | 14.2\% | 0.1\% | 34.0\% | 16.9\% | 0.8\% | 39.8\% |

Table 12. Demographic Profile of Native Speakers of Other Languages Proficient in English and of Limited English Proficiency. Boston Public School, AY2003-AY2006

|  | AY2003 |  |  | AY2004 |  |  | AY2005 |  |  | AY2006 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | NSOL | EP | LEP | NSOL | EP | LEP | NSOL | EP | LEP | NSOL | EP | LEP |
| A. Enrollment | 27,149 | 12,429 | 14,720 | 25,695 | 15,690 | 10,005 | 24,751 | 16,338 | 8,413 | 24,421 | 14,695 | 9,726 |
| B. Gender (\% male) | 50.4\% | 49.7\% | 51.0\% | 50.5\% | 49.4\% | 52.2\% | 50.5\% | 49.4\% | 52.4\% | 50.7\% | 49.0\% | 53.2\% |
| C. Poverty Status (receiving free or reduced price lunch) | 83.6\% | 79.6\% | 86.9\% | 81.9\% | 79.9\% | 85.2\% | 82.9\% | 80.5\% | 87.5\% | 81.8\% | 79.8\% | 84.7\% |
| D. Race/Ethnicity |  |  |  |  |  |  |  |  |  |  |  |  |
| Asian/Pacific Islander | 17.3\% | 17.7\% | 16.9\% | 17.1\% | 19.4\% | 13.6\% | 17.0\% | 18.4\% | 14.3\% | 16.9\% | 18.7\% | 14.1\% |
| Black | 24.6\% | 29.0\% | 20.8\% | 23.9\% | 25.0\% | 22.1\% | 23.4\% | 24.2\% | 22.0\% | 22.7\% | 23.5\% | 21.4\% |
| Latino | 50.7\% | 43.5\% | 56.8\% | 52.2\% | 47.5\% | 59.4\% | 53.0\% | 49.7\% | 59.4\% | 54.1\% | 50.2\% | 59.9\% |
| White | 7.2\% | 9.5\% | 5.3\% | 6.7\% | 7.9\% | 4.8\% | 6.4\% | 7.6\% | 4.1\% | 6.3\% | 7.4\% | 4.5\% |

## 2. The Characteristics of the NSOL Students Who are Proficient in English and Who Are of Limited English Proficiency

In examining the enrollments of the two groups of NSOL students defined by language proficiency—students determined to be of limited English proficiency (LEP) and those who are proficient in English (EP) - we observe the decline in enrollments of LEP students in the first two years of the implementation of SEI with the recovery in the third. Demographically, the proportion of male students was greater among LEP than EP students, with a spread of more than 5 points in AY2003, the largest in the period of observation. The gender disproportionality was greatest at the middle school level where, in 2005, 58\% of LEP students were male compared to $51 \%$ of EP students. In terms of poverty status, greater proportions of LEP students were receiving free or reduced price lunch than EP students. The proportions of students receiving free or reduced price lunch followed the trend seen in the total population, a decrease as students age.
The most changed characteristic over this time period was the racial make-up of both populations. Among EPs we observe the decline among Black and white students, with increases in both the Asian and Latino populations. Among LEPs, the decline is observed among the Asian and white students, while both Blacks and Latinos saw rising proportions during the four years of observation. This rise in the proportion of Blacks among the LEP population signals the presence of new African immigrant groups in Boston and in BPS, since the numbers of both Cape Verdeans and Haitians have remained stable (as evidenced by the report on language groups which accompanies this one).

## 3. The Characteristics of LEPs Enrolled in Programs for ELs and Those in General Education Programs

Among students of limited English proficiency enrolled in the programs for English Learners and in General Education, we find more demographic shifts than in the previous comparisons. For example, in the case of gender, the proportion of male LEPs in General Education increased in the first two years of the implementation from $51.8 \%$ to $55.2 \%$, then decreased to $52.2 \%$ in AY2006. The increase in the proportion of male LEPs in programs for English Learners was more modest at first, but, by the end of the observation period, showed a larger change than that experienced by the LEPs in General Education. The latter population has a larger proportion of males than the LEPs in EL programs through the first three years of observation, reversing this pattern in the last year.

A similar pattern is observed in relation to the changes in the proportion of students who were receiving free or reduced price lunch: there was a swift rise in the proportion of LEPs in General Education who were receiving free or reduced price lunch—from $81.2 \%$ in AY2003 to $87.4 \%$ in AY2005, declining to $83.9 \%$ in AY2006. Meanwhile, LEPs in EL programs showed a more modest rise at first, but a larger net change by the end of the period of observation. Poverty rates were higher among LEPs in EL programs throughout the period, when compared to LEPs in General Education.

There was change in the racial make-up of both groups of LEP students, but there was not a pattern affecting all groups. Among Asian students (the main groups being Vietnamese and speakers of Chinese dialects), there was a decline in the participation in General Education programs in AY2004, followed by a progressive increase in the last two years of observation, but their pattern of participation in EL programs remained relatively steady through the period. In contrast, there was an increase in the proportion of Black students-mostly Somali and Haitian and Cape Verdean Creole speakers-in General Education programs in AY2004, followed by decreases in the last two years. After a small decrease in AY2004, the proportion of Black students in EL programs increased. Among Latinos, there was a swift increase in their enrollment in General Education programs in the first two years of implementation, increasing by 5.5 percentage points between AY2003 and AY2005. The proportion of Latinos en EL programs increased in the year of implementation, but then declined to baseline values and remained steady at $60.8 \%$. The changes in the proportions of white LEP students in both General Education and EL programs were the most erratic, especially among LEP students in General Education.

Table 13. Demographic Profile of Limited English Proficiency Students in General Education Programs and in Programs for English Learners. Boston Public Schools, AY2003-AY2006

|  | AY2003 |  |  |  | AY2004 |  |  | AY2005 |  |  | AY2006 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | LEP | In General Ed | In EL Programs | LEP | In General Ed | In EL Programs | LEP | In <br> General Ed | In EL Programs | LEP | In <br> General <br> Ed | In EL Programs |
| A. Enrollment | 14,720 | 5,053 | 9,667 | 10,005 | 4,013 | 5,992 | 8,413 | 2,881 | 5,532 | 9,726 | 1,112 | 8,614 |
| B. Gender (\% male) | 51.0\% | 51.8\% | 50.6\% | 52.2\% | 54.2\% | 50.8\% | 52.4\% | 55.2\% | 51.0\% | 53.2\% | 52.2\% | 53.4\% |
| C. Poverty Status (receiving free or reduced price lunch) | 86.9\% | 81.2\% | 89.9\% | 85.2\% | 83.3\% | 86.4\% | 87.5\% | 87.4\% | 87.6\% | 84.7\% | 83.9\% | 84.8\% |
| D. Race/Ethnicity |  |  |  |  |  |  |  |  |  |  |  |  |
| Asian/Pacific Islander | 16.9\% | 24.2\% | 13.2\% | 13.6\% | 13.8\% | 13.5\% | 14.3\% | 16.0\% | 13.4\% | 14.1\% | 20.7\% | 13.2\% |
| Black | 20.8\% | 21.5\% | 20.5\% | 22.1\% | 24.8\% | 20.3\% | 22.0\% | 22.2\% | 21.9\% | 21.4\% | 19.3\% | 21.7\% |
| Latino | 56.8\% | 49.3\% | 60.8\% | 59.4\% | 53.4\% | 63.4\% | 59.4\% | 56.8\% | 60.8\% | 59.9\% | 53.2\% | 60.8\% |
| White | 5.3\% | 4.8\% | 5.6\% | 4.8\% | 7.8\% | 2.8\% | 4.1\% | 4.9\% | 3.8\% | 4.5\% | 6.7\% | 4.5\% |

## Comparison of Educational Outcomes of Native English Speakers and Native Speakers of Other Languages


#### Abstract

COLOR KEY All BPS NES NSOL EP LEP In General Ed In EL Programs


This section compares the outcomes of native English speakers and native speakers of languages other than English along a series of indicators related to the engagement and academic achievement of students, shown in the highlighted row of the box below. These include attendance, out-of-school suspensions, grade retention, and transfers along with annual middle school and high school drop-out rates. It also presents the outcomes of test-takers from these groups in the Massachusetts Comprehensive Assessment System (MCAS) in Grades 4, 8, and 10. In all outcome indicators, we assess and report the statistical difference between groups. ${ }^{50}$

Figure 4. Comparison of Outcomes of Native English Speakers and Native Speakers of Other Languages

| Total | All BPS |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Native Language | NES | NSOL | LEP |  |
| Language <br> Proficiency | EP | EP |  |  |
| Program <br> Participation | In General Education | In General Education | In Gen Ed | In EL <br> Programs |

## 1. Attendance

Attendance rates measure the percentage of school days in which students have been present at their schools. It is one measure of student engagement in school. Research has shown that attendance rates correlate with measures of school effectiveness as well as with high school completion rates (Binkley \& Hooper, 1989; Bryk \& Thum, 1989; Sween et al., 1987). During the study period, median attendance rates were consistent over time for BPS students overall, at 95\% each year of the study. Native English speakers also had stable median attendance rates of $94 \%$, while native speakers of other languages had stable median rates of $96 \%$. Native speakers of other languages therefore attended school three to four more days per school year than native English speakers.

Table 14. Median Attendance Rates. Selected Populations. Boston Public Schools, AY2003-AY2006

| All BPS |  | AY2003 | AY2004 | AY2005 | AY2006 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 95.2\% | 95.0\% | 95.0\% | 95.0\% |
|  | NES | 94.4\% | 94.4\% | 94.4\% | 94.4\% |
|  | NSOL | 96.1\% | 96.0\% | 95.6\% | 95.6\% |
| Elementary School BPS |  | 96.1\% | 96.1\% | 96.1\% | 96.0\% |
|  | NES | 95.6\% | 95.6\% | 95.6\% | 95.5\% |
|  | NSOL | 96.7\% | 96.7\% | 96.7\% | 96.6\% |
| Middle School BPS |  | 95.6\% | 95.4\% | 95.6\% | 95.6\% |
|  | NES | 94.4\% | 94.7\% | 95.0\% | 95.0\% |
|  | NSOL | 96.5\% | 96.1\% | 96.1\% | 96.1\% |
| High School BPS |  | 92.7\% | 92.2\% | 91.9\% | 92.2\% |
|  | NES | 91.7\% | 91.1\% | 91.1\% | 91.2\% |
|  | NSOL | 93.6\% | 93.3\% | 92.9\% | 92.8\% |

Note: Differences in attendance between NES and NSOL students are statistically significant for all years (M-W P<.001).

### 1.1 Attendance by Grade Level

At each grade level, overall attendance rates were also stable. At the elementary and middle levels, they were around $96 \%$, and at the high school level, they were around $92 \%$. Native English speakers in elementary school had median attendance rates of $95.6 \%$, while native speakers of other languages in elementary school had median attendance rates of $96.7 \%$. Native English speakers in middle school had median attendance rates of $95 \%$, while native speakers of other languages in middle school had median attendance rates of $96 \%$. One percentage point separated the attendance rates of native English speakers from native speakers of other languages in elementary and middle school. In high school, attendance rates were lower each year of the study than in elementary and middle school. Native English speakers had median attendance rates of $91 \%$, and native speakers of other languages had median attendance rates of $93 \%$. Therefore, the difference between the two groups at the high school level was twice the difference at the elementary and middle school levels. At every grade level, attendance rates were higher for NSOL students than for NES students.

## 2. Out-of-School Suspension

There are two types of suspensions reported by Massachusetts school districts: in-school suspensions and out-of-school suspensions. In an in-school suspension, the student is removed from his/her class and placed in a separate environment within the school. In an out-of-school suspension, the student is removed from the school for the time of the suspension. In this report, we present the out-of-school suspension rate, defined as the ratio of out-of-school suspensions to the total enrollment during the year.

Out-of-school suspension is a strong disciplinary action, usually prompted by what is deemed as disruptive behavior, and which separates the student from the school. Out-ofschool suspensions result in the inability to participate in any school activity and therefore exclusion from learning on those days (Cotton, 1995; Pinnell, 1985). Research points to increased risk of low academic achievement, of dropping out of school, and of involvement in the juvenile justice system as a result of suspensions (Ali \& Dufresne, 2008). Schools with low out-of-school suspension rates have higher student engagement and school climates more conducive to learning (Cotton, 1990).
Total suspension rates in BPS started at 7.6\% in AY2003 and ended at 6.6\% in AY2006, a drop of one percentage point. Suspension rates for native English speakers declined from $9.6 \%$ to $7.8 \%$ during the study period, while they remained steady at $5 \%$ for native speakers of other languages. The suspension rate gap between the two groups reduced from almost 5 percentage points to a gap of less than 3 percentage points.

Table 15. Out-of-School Suspension Rates. Selected Populations. Boston Public Schools, AY2003-AY2006

|  |  | AY2003 | AY2004 | AY2005 | AY2006 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| All BPS |  | $7.6 \%$ | $7.1 \%$ | $6.7 \%$ | $6.6 \%$ |
|  | NSS | $9.6 \%$ | $8.7 \%$ | $7.9 \%$ | $7.8 \%$ |
|  | NSOL | $4.9 \%$ | $5.0 \%$ | $5.0 \%$ | $4.9 \%$ |
| Elementary School BPS |  | $3.8 \%$ | $3.4 \%$ | $3.0 \%$ | $2.8 \%$ |
|  | NES | $5.1 \%$ | $4.3 \%$ | $3.7 \%$ | $3.4 \%$ |
|  | NSOL | $2.1 \%$ | $2.0 \%$ | $2.0 \%$ | $2.0 \%$ |
| Middle School BPS |  | $12.9 \%$ | $13.8 \%$ | $13.8 \%$ | $13.4 \%$ |
|  | NES | $15.9 \%$ | $15.6 \%$ | $15.4 \%$ | $14.8 \%$ |
|  | NSOL | $8.5 \%$ | $11.1 \%$ | $11.3 \%$ | $11.3 \%$ |
| High School BPS |  | $9.1 \%$ | $7.5 \%$ | $6.6 \%$ | $7.0 \%$ |
|  | NES | $11.4 \%$ | $9.6 \%$ | $8.2 \%$ | $8.9 \%$ |
|  | NSOL | $6.3 \%$ | $4.9 \%$ | $4.7 \%$ | $4.7 \%$ |

Note: Differences in suspension rates between NES and NSOL students are statistically significant (Chi2 Test $\mathrm{P}<.000$ ) for all years for all BPS and at all grade levels.

### 2.1 Suspension by Grade Level

In elementary school, suspension rates declined steadily during the study period from 3.8\% to $2.8 \%$. Suspension rates for native English speakers declined from $5.1 \%$ to $3.4 \%$, while they hovered around $2.0 \%$ for native speakers of other languages. In middle school, suspension rates were four to five times the elementary school suspension rates. Overall, middle school suspension rates started at $12.9 \%$, rose to $13.8 \%$ in AY2004 and AY2005, then fell to $13.4 \%$ in AY2006. Among middle school students, native English speakers had higher suspension rates than native speakers of other languages each year of the study. In the first year of the study, the gap between the two groups was 7.4 percentage points. The gap reduced each year of the study, ending at 3.5 percentage points. In high school, overall suspension rates dropped from $9.1 \%$ to $7.0 \%$ during the study. Following the trend of elementary and middle school students, high school native English speakers were suspended at higher rates than high school native speakers of other languages. The suspension rates of both groups fell during the study period, from $11.4 \%$ to $8.9 \%$ for native English speakers and from $6.3 \%$ to $4.7 \%$ for native speakers of other languages. Proportionally, these are similar declines for the two groups. In summary, suspension rates declined slightly at the elementary and high school levels. At every grade level, suspension rates were higher for NES than for NSOL students, although at every level, this gap decreased over the study period. Middle school NSOL students were the only group to experience an increase in suspension rates.

## 3. Transfer

Transfer rates are one way to describe the mobility of students during the school year, those who are willing to change schools after the school year has already begun. Schools with high mobility rates are not "holding" their students for a variety of reasons (Rumberger \& Thomas, 2000; State University of New York, 1992). Transfer rates were $5.6 \%$ the first and last year of the study, and were $5.9 \%$ in the middle two years of the study. Each year of the study, native English speakers had higher transfer rates than native speakers of other languages, although the difference between the two groups was less than one percentage point each year.

Table 16. Transfer Rates. Selected Populations. Boston Public Schools, AY2003-AY2006

|  |  | AY2003 | AY2004 | AY2005 | AY2006 |
| :--- | ---: | :--- | :--- | :--- | :--- |
|  |  | $5.6 \%$ | $5.9 \%$ | $5.9 \%$ | $5.6 \%$ |
|  | NES | $6.0 \%$ | $6.3 \%$ | $6.0 \%$ | $5.7 \%$ |
|  | NSOL | $5.2 \%$ | $5.5 \%$ | $5.7 \%$ | $5.5 \%$ |
|  |  | $5.6 \%$ | $6.0 \%$ | $5.7 \%$ | $5.3 \%$ |
|  | NES | $6.0 \%$ | $6.5 \%$ | $5.7 \%$ | $5.3 \%$ |
|  | NSOL | $5.2 \%$ | $5.4 \%$ | $5.7 \%$ | $5.4 \%$ |
| Middle School BPS |  | $5.4 \%$ | $5.6 \%$ | $5.7 \%$ | $5.7 \%$ |
|  | NES | $6.1 \%$ | $6.1 \%$ | $5.9 \%$ | $6.1 \%$ |
|  | NSOL | $4.4 \%$ | $4.9 \%$ | $5.3 \%$ | $5.1 \%$ |
|  |  | $5.9 \%$ | $6.0 \%$ | $6.2 \%$ | $6.0 \%$ |
|  | NES | $5.9 \%$ | $6.0 \%$ | $6.5 \%$ | $6.2 \%$ |
|  | NSOL | $5.8 \%$ | $6.0 \%$ | $5.8 \%$ | $5.8 \%$ |

Notes: (1) For all BPS, differences in transfer rates between NES and NSOL students are statistically significant (Chi2 Test $\mathrm{P}<.000$ ) for AY2003 and AY2004. (2) By grade level, differences in transfer rates between NES and NSOL students are statistically significant (Chi2 Test $\mathrm{P}<.002$ ) for elementary and middle school in AY2003, for all grade levels in AY2004, for high school in AY2005 and for middle school in AY2006.

### 3.1 Transfers by Grade Level

At the elementary level, transfer rates mirrored the aggregate, with students transferring at between $5 \%$ and $6 \%$ each year of the study. Elementary level native English speakers had a slight decline in transfer rates, while native speakers of other languages had a slight increase. Native English speakers at this grade level started the study period with higher transfer rates than native speakers of other languages, and they ended the study period with slightly lower (although not statistically significantly different) rates than native speakers of other languages. At the middle school level, transfer rates also mirrored the aggregate, with students transferring at between $5 \%$ and $6 \%$ each year of the study. Each year of the study, middle school native English speakers transferred at slightly higher rates than native speakers of other languages. At the high school level, transfer rates hovered around 6\%, slightly higher than at elementary and middle school levels. There was little difference in the transfer rates of native English speakers and native speakers of other languages at the high school level. In summary, transfer rates during the study period did not change much during the study period, hovering from 5 to $6 \%$ at every grade level. There were only slight differences in the transfer rates between NES and NSOL students.

## 4. Grade Retention

Grade retentions refer to the students who were not promoted from one grade to the next on time due to low academic performance. Retention in grade usually takes place in the early years, but in some school systems students across all grades are exposed to this practice. Increasingly, there is evidence that students retained (or "kept back") in grade have a higher risk of dropping out of school and of depressed educational outcomes (Kelly, 1999; Jimerson, Anderson, \& Whipple, 2002). We are able to calculate grade retentions for three cohorts of students given four years of data. Overall grade retention rates in BPS ranged from $8 \%$ to $9 \%$ during the study period. The grade retention rates of native English speakers were relatively stable, at $8.7 \%$ in the first cohort to $8.9 \%$ in the third cohort. ${ }^{51}$ The grade retention rates of native speakers of other languages rose 0.5 percentage points, from $8.2 \%$ to $8.7 \%$.

Table 17. Grade Retention Rates. Selected Populations. Boston Public Schools, AY2003-AY2006

|  |  | AY2003 to AY2004 | AY2004 to AY2005 | AY2005 to AY2006 |
| :--- | :--- | :--- | :--- | :--- |
|  | All BPS | NES | $8.4 \%$ | $8.6 \%$ |
|  | NSOL | $8.2 \%$ | $8.8 \%$ | $8.9 \%$ |
|  | NES | $7.3 \%$ | $8.4 \%$ | $8.9 \%$ |
|  | NSOL | $7.5 \%$ | $6.8 \%$ | $7.7 \%$ |
|  |  | $4.2 \%$ | $6.9 \%$ | $7.5 \%$ |
|  | Middle School BPS | NES | $4.7 \%$ | $6.7 \%$ |
|  | NSOL | $3.5 \%$ | $4.5 \%$ | $6.8 \%$ |
|  |  | $13.0 \%$ | $4.3 \%$ | $4.0 \%$ |
| High School BPS | NES | $13.6 \%$ | $4.7 \%$ | $4.4 \%$ |
|  | NSOL | $12.2 \%$ | $13.6 \%$ | $3.4 \%$ |
|  |  | $14.4 \%$ | $14.0 \%$ |  |

Note: (1) For all BPS, differences in grade retention rates between NES and NSOL students are statistically significant (Chi2 Test $\mathrm{P}<.05$ ) for AY2004. (2) Differences in grade retention rates between NES and NSOL students are statistically significant at the middle and high school levels (Chi2 Test $\mathrm{P}<.007$ ) for the first cohort. Differences in grade retention rates between NES and NSOL students are statistically significant at the high school level only (Chi2 Test $\mathrm{P}=.001$,) for the second cohort. Differences in grade retention rates between NES and NSOL students are statistically significant at the elementary and middle school levels (Chi2 Test $\mathrm{P}<.04$ ) for the third cohort.

### 4.1 Grade Retention by Grade Level

Looking at aggregate grade retention rates masks dramatic rate differences by grade level. Elementary school grade retention rates were around 7\% for the three cohorts. Elementary native English speakers posted an overall increase in grade retention rates during the study, from $7.3 \%$ to $7.5 \%$. Native speakers of other languages posted slightly declining grade retention rates, from $7.5 \%$ to $6.8 \%$. At middle school, with only three grades, grade retention rates were slightly lower than at elementary school, with rates for the third cohort at 4.0\%. Middle school native English speakers had grade retention rates that were higher than native speakers of other languages for the first and third cohorts by about $24 \%$. In the second cohort, that relationship was reversed, with native speakers of other languages having higher grade retention rates than native English speakers in middle school. High school grade retention rates were two to more than three times higher than elementary and middle school
grade retention rates, starting the study period at $13 \%$ and ending the study period at $14 \%$. Native English speakers had relatively stable rates, while native speakers of other languages posted increasing rates, from $12.2 \%$ to $14.2 \%$ during the study period. In addition, native speakers of other languages in the first cohort had lower grade retention rates than native English speakers, while in the third cohort they had higher grade retention rates. In summary, the highest grade retention rates by far appear in high school. The differences between NES and NSOL students in grade retention are minimal.

## 5. Annual Drop-Out Rate

Districts report on their enrollment several times a year, allowing the Massachusetts Department of Elementary and Secondary Education to keep track of students who abandon school. A student may "drop out" because he or she entered the Job Corps, the military, employment, or a non-degree-granting educational program, or because the student was incarcerated (MDESE, 2008d). Students may also drop out for personal reasons such as pregnancy, health reasons or the need to care for an ill relative. In some cases the school district may be unaware of the student's plans or the location of the student (MDESE, 2008d).
The Massachusetts Department of Elementary and Secondary Education reports drop-out data in two ways: the annual drop-out rate and the four-year (or cohort) drop-out rate. The annual drop-out rate reports the percentage of students who dropped out of school in a specific year (MDOE, 2007b). The four-year or cohort drop-out rate reports the percentage of students in a cohort who dropped out of school at any time between Grades 9 and 12 during a specific four-year period; this rate shows the accumulated effect of students dropping out over four years (MDOE, 2007b, c). Although the cohort drop-out rate gives a more complete view of the drop-out problem in schools, in this report we focus on the annual drop-out rate for each of the years under observation because the expanse of time of the data set does not allow for the four-year analysis. (The Department of Elementary and Secondary Education reports only on the high school drop-out rate, that is, school desertion taking place after the 9th grade.) We report here on the annual drop-out rate in both middle schools and high schools.
In middle school, annual drop-out rates started at 1.1\% in AY2003, dropped to $0.4 \%$ in AY2004, peaked at 4.0\% in AY2005, and ended the study period at $2.6 \%$ in AY2006. Both native English speakers and native speakers of other languages showed similar patterns of fluctuation and ended the study period at a $2.6 \%$ annual drop-out rate, a $136 \%$ increase. High school annual drop-out rates were much higher than in middle school. They also steadily rose from $7.7 \%$ to $10.9 \%$ during the period studied, a $42 \%$ increase. Both NES and NSOL students experienced drop-out rate increases of 3 percentage points overall.

Table 18. Annual Drop-Out Rates. Selected Populations. Boston Public Schools, AY2003-AY2006

|  |  | AY2003 | AY2004 | AY2005 | AY2006 |
| :--- | ---: | :--- | :--- | :--- | :--- |
| Middle School BPS |  | $1.1 \%$ | $0.4 \%$ | $4.0 \%$ | $2.6 \%$ |
|  | NES | $1.3 \%$ | $0.4 \%$ | $4.2 \%$ | $2.6 \%$ |
|  | NSOL | $0.9 \%$ | $0.4 \%$ | $3.5 \%$ | $2.6 \%$ |
| High School BPS |  | $7.7 \%$ | $5.3 \%$ | $8.2 \%$ | $10.9 \%$ |
|  | NES | $8.7 \%$ | $5.9 \%$ | $9.0 \%$ | $11.7 \%$ |
|  | NSOL | $6.5 \%$ | $4.6 \%$ | $7.2 \%$ | $9.8 \%$ |

Notes: Differences in dropout rates between NES and NSOL students are statistically significant at the middle school level for AY2003 ( $\mathrm{P}=.05$ ) only. Differences in dropout rates between NES and NSOL students at the high school level are statistically significant (Chi2 Test $\mathrm{P}<.000$ ) for all years.

## 6. MCAS Pass Rates

As part of the Massachusetts Educational Reform Act of 1993, the state instituted the Massachusetts Comprehensive Assessment System as the measure of achievement of Massachusetts public school students. These measures of accountability, later folded into the state's response to the federal requirements of No Child Left Behind, were deployed fully in 2001. Tenth graders taking the MCAS test that year were required to pass in both Math and English Language Arts in order to graduate from high school in June 2003, the end of the academic year prior to the implementation of Question 2.

During the period of the study, MCAS tested English Learners in Reading (Grade 3), English Language Arts (Grades 4, 7, and 10), Math (Grades 4, 8, and 10), and Science (Grades 5 and 8) (MDOE, 2008c). English Learners who have been in U.S. schools for less than one year are exempt from the ELA test, and Spanish Speaking ELs who have been in US schools for less than three years may take a math test in Spanish in Grade 10 (MDOE, 2003-2006). Here we report on outcomes on ELA and Math exams for Grades 4 and 10 and on Math in Grade 8. MCAS exam outcomes in English/Language Arts (ELA) and Math were analyzed by pass rates (proportion of students performing in Advanced, Proficient, and Needs Improvement categories) for four years.

### 6.1 MCAS Grade Four

At the fourth grade, overall MCAS pass rates in ELA were about 73\% at the beginning and end of the study period. Native English speakers started the study period with pass rates of $75 \%$ and ended the study period with pass rates of $72 \%$. In contrast, native speakers of other languages started the study period with pass rates of $70 \%$ and ended the study period with pass rates of 74\%. In other words, in fourth grade ELA, the pass rates of native English speakers declined while the pass rates of native speakers of other languages increased, such that they switched positions, with native speakers of other languages ending the study period surpassing native English speakers in passing MCAS. In fourth grade Math, overall MCAS pass rates increased from $63 \%$ to $74 \%$, a $17 \%$ increase during the study period. Each subgroup also improved its pass rate. Native English speakers passed at increasingly higher rates during the study period, from $62 \%$ to $71 \%$. Native speakers of other languages passed at $65 \%$ in the first year and $76 \%$ in the last year of the study. In comparing the two subgroups, native speakers of other languages passed the Math exam at higher rates than native English speakers each year with a three to five percentage point gap. In summary, at the fourth grade, pass rates among NES and NSOL students were similar in ELA and steady over
time and 3 to 5 percentage points higher for NSOL students in Math. Math pass rates were increasing over the study period for both groups.

Table 19. Grade 4 MCaS Pass Rates. Selected Populations. Boston Public Schools, AY2003-AY2006

|  |  | AY2003 | AY2004 | AY2005 | AY2006 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Grade 4 E | AS Pass R |  |  |
| Total Test Takers |  | 73.3\% | 77.5\% | 74.1\% | 73.2\% |
|  | NES | 75.1\% | 78.1\% | 74.6\% | 72.0\% |
|  | NSOL | 70.2\% | 76.4\% | 73.2\% | 74.3\% |
|  |  | rade 4 M | AS Pass |  |  |
| Total Test Takers |  | 63.2\% | 70.1\% | 68.5\% | 73.7\% |
|  | NES | 62.3\% | 68.6\% | 66.5\% | 71.2\% |
|  | NSOL | 65.0\% | 72.7\% | 71.9\% | 75.8\% |

### 6.1 MCAS Grade Eight

MCAS pass rates for this Math exam increased during the study period, from $48 \%$ to $53 \%$. These are much lower pass rates in general than the fourth grade Math exam. Pass rates of native English speakers were $45 \%$ in the first year of the study, and rose to $52 \%$ by the last year of the study. Native speakers of other languages also posted increasing pass rates for this exam, starting out at $53 \%$ and ending at $56 \%$. While native speakers of other languages passed at higher rates at both ends of the study, their improvement in pass rates was smaller (6\%) than that of native English speakers (16\%). The eight point pass rate difference reduced to less than four percentage points by the last year of the study.

Table 20. Grade 8 Math MCAS Pass Rates. Selected Populations. Boston Public Schools, AY2003-AY2006

|  |  | AY2003 | AY2004 | AY2005 | AY2006 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Total Test Takers |  | 48.1\% | 54.0\% | 51.6\% | 53.4\% |
|  | NES | 44.7\% | 50.6\% | 52.7\% | 51.9\% |
|  | NSOL | 52.6\% | 58.9\% | 49.8\% | 55.7\% |

Note: Grade 8 MCAS pass rate differences between NES and NSOL students are statistically significant (Chi2 Test $\mathrm{P}<.00$ ).

### 6.2 MCAS Grade Ten

The ELA and Math MCAS exams at Grade 10 are high-stakes: students must pass these two exams to graduate from high school. On the ELA exam, overall pass rates rose from $67 \%$ to $77 \%$ during the study period. Pass rates for native English speakers improved from $72 \%$ to $83 \%$, while pass rates for native speakers of other languages improved from $61 \%$ to $71 \%$. Each year, there was about a 10 percentage point difference in pass rates between the two subgroups, with native English speakers passing at the higher rates.

On the Math exam, overall pass rates fluctuated around $65 \%$ during the study period. Native English speakers improved their pass rates from $62 \%$ to $69 \%$ in the first and fourth years, respectively, while native speakers of other languages posted a decline from $69 \%$ to $66 \%$ passing.

In summary, NES students outperformed NSOL students on the tenth grade MCAS ELA tests each year of the study; both groups improved over time. In the Math test, however, NSOL students started the study period with higher pass rates than NES students. By the end of the study period, NES students were passing at a higher rate than NSOL students.

Table 21. Grade 10 MCAS Pass Rates. Selected Populations. Boston Public Schools, AY2003-AY2006


Note: Grade 10 MCAS pass rate differences between NES and NSOL students are found to be statistically significant (AY2005 Chi2 Test $\mathrm{P}<.04$; all other years Chi2 Test $\mathrm{P}<.00$ ).

## Comparison of Educational Outcomes of Native Speakers of Other Languages Who Are English Proficient and Who Are of Limited English Proficiency

To better understand the outcomes of native speakers of languages other than English, we analyzed the outcomes of those deemed English proficient and those designated as LEP. These two groups fared differently during the study period, with LEP students not only trailing EP students on every indicator except attendance and suspensions, but also experiencing worsening results in transfer rates, in grade retention rates, and in annual drop-out rates.

- Middle school grade retention rates for NSOL LEP students were two to three

COLOR KEY
All BPS
NES
NSOL
EP
LEP
In General Ed
In EL Programs

The findings in the previous section showed that on most outcomes indicators, NSOL students performed comparably or better than NES students. However, the findings also point to troubling declines in the outcomes of some NSOL students during the years initially following Question 2 passage. In order to illuminate which NSOL students experienced these negative effects, it was necessary to analyze the outcomes of those who were English proficient and LEP each year of the study. This outcomes section repeats an analysis of the outcomes indicators, comparing these two groups of NSOL students: English proficient and LEP. They are highlighted in the figure below to show their relation to NES and NSOL students analyzed previously. For each outcome indicator, we describe the outcomes of EP and LEP students over time and in relation to each other.

Figure 5. Comparison of Outcomes of Native Speakers of Other Languages Who Are English Proficient and Who Are Limited English Proficient

| Total | All BPS | NSOL |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Native Language | NES | EP | LEP |  |
| Language <br> Proficiency | EP | In General Education | In Gen Ed | In EL <br> Programs |
| Program <br> Participation | In General Education |  |  |  |

## 1. Attendance

Median attendance rates changed less than one percentage point over the study period. Students proficient in English and students designated as LEP had similar attendance rates in each year of the study.

Table 22. NSOL Attendance Rates. Selected Populations. Boston Public Schools, AY2003-AY2006

|  | AY2003 | AY2004 | AY2005 | AY2006 |
| :---: | :---: | :---: | :---: | :---: |
| All NSOL | 96.1\% | 96.0\% | 95.6\% | 95.6\% |
| EP | 96.1\% | 96.1\% | 95.6\% | 95.5\% |
| LEP | 96.1\% | 95.6\% | 95.6\% | 95.6\% |
| Elementary School NSOL | 96.7\% | 96.7\% | 96.7\% | 96.6\% |
| EP | 96.7\% | 97.2\% | 96.7\% | 96.7\% |
| LEP | 96.7\% | 96.6\% | 96.6\% | 96.1\% |
| Middle School NSOL | 96.5\% | 96.1\% | 96.1\% | 96.1\% |
| EP | 96.7\% | 96.1\% | 96.1\% | 96.1\% |
| LEP | 96.1\% | 95.6\% | 95.6\% | 95.5\% |
| High School NSOL | 93.6\% | 93.3\% | 92.9\% | 92.8\% |
| EP | 92.2\% | 93.3\% | 92.9\% | 92.8\% |
| LEP | 94.0\% | 93.0\% | 92.8\% | 93.1\% |

Notes: (1) For all BPS, all differences in attendance between NSOL students who are EP or designated as LEP are statistically significant for all years ( $\mathrm{M}-\mathrm{W} \mathrm{P}<.00$ ). (2) By grade level, all differences in attendance between NSOL students who are EP or designated as LEP are statistically significant (M-W $\mathrm{P}<.001$ ) for all levels. in AY2003 and AY2004. Statistically significant differences are seen at the elementary and high school levels in AY2005 and AY2006 (M-W P<.001).

### 1.1 Attendance by Grade Level

Attendance rates at the elementary and middle levels for native speakers of other languages were $96-97 \%$ all years of the study. Differences between English proficient and LEP students were minimal but statistically significant. At the high school level, median attendance rates were about $93 \%$ all four years of the study, with small differences between English proficient and LEP students.

## 2. Out-of-School Suspension

Suspension rates for NSOL students were about 5\% all four years of the study. Disaggregating by English proficiency revealed differences in suspension rates. English proficient students were suspended at close to $6 \%$ each year of the study, while LEP students were suspended at about 4\% each year of the study. In fact, English proficient students posted increases in suspension rates while LEP students posted overall decreases in suspension rates, resulting in a gap of 2.4 percentage points or $41 \%$.

### 2.1 Suspension by Grade Level

Suspension rates changed in different ways over the study period at the different school levels. At the elementary level, suspension rates were stable at about $2 \%$. They were higher for English proficient than for LEP students each year of the study (in the fourth year, 2.6\% compared to $1.5 \%$ ). At the middle school level, suspension rates were much higher than at the elementary level, at $11.3 \%$ in the last two years of the study. Suspension rates for NSOL students jumped from year 1 to year 2 of the study in middle school, and the rates were not significantly different for English proficient and LEP middle school students. At the high school level, suspension rates for NSOL students decreased from $6.3 \%$ in the first year to $4.7 \%$ in the final year of the study, reflecting a decline in suspension rates for both English proficient and LEP students. Each year, similar to the elementary level, English proficient students had higher suspension rates than LEP students.

Table 23. NSOL Suspension Rates. Selected Populations. Boston Public Schools, AY2003-AY2006

|  |  | AY2003 | AY2004 | AY2005 | AY2006 |
| :--- | ---: | :--- | :--- | :--- | :--- |
| All NSOL | EP | $5.7 \%$ | $5.9 \%$ | $5.7 \%$ | $5.7 \%$ |
|  | LEP | $4.2 \%$ | $3.9 \%$ | $3.6 \%$ | $5.9 \%$ |
| Elementary School NSOL |  | $2.1 \%$ | $2.0 \%$ | $2.0 \%$ | $3.5 \%$ |
|  | EP | $2.5 \%$ | $2.5 \%$ | $2.5 \%$ | $2.6 \%$ |
| Middle School NSOL | LEP | $1.8 \%$ | $1.5 \%$ | $1.4 \%$ | $1.5 \%$ |
|  | EP | $8.5 \%$ | $11.1 \%$ | $11.3 \%$ | $11.3 \%$ |
|  | LEP | $8.6 \%$ | $10.7 \%$ | $11.3 \%$ | $11.1 \%$ |
| High School NSOL |  | $6.3 \%$ | $12.4 \%$ | $11.3 \%$ | $12.0 \%$ |
|  | EP | $7.7 \%$ | $4.9 \%$ | $4.7 \%$ | $4.7 \%$ |
|  | LEP | $5.4 \%$ | $5.2 \%$ | $4.8 \%$ | $5.1 \%$ |

Notes: (1) Differences in suspension rates between NSOL students who are EP or designated as LEP are statistically significant (Chi2 Test $\mathrm{P}<.000$ ) for all years. (2) All differences in suspension rates between NSOL students who are EP or designated as LEP are statistically significant at the elementary level for all years (Chi2 Test $\mathrm{P}<.02$ ), and at the high school level for AY2003, AY2004, and AY2006 (Chi2 Test P<.05). Differences in suspension rates for middle school are not statistically significant for any year (Chi2 Test $\mathrm{P}<.08$ ), nor are differences statistically significant at the high school level in AY2005 ( $\mathrm{P}=.713$ ).

## 3. Grade Retention

Grade retention rates among NSOL students increased slightly from 8.2\% to 8.7\% during the study period. Students who were proficient in English had lower grade retention rates, holding steady at about $6.4 \%$. LEP students had more than double those grade retention rates in each cohort, with a $13.1 \%$ retention rate in the second two cohorts.

### 3.1 Grade Retention by Grade Level

The gap between English proficient and LEP students was seen at all three grade levels. In elementary school, there was an overall decline in grade retentions for NSOL students, from $7.5 \%$ to $6.8 \%$. Both English proficient and LEP students also posted reductions in grade retention rates. English proficient students were retained in grade at half the rates of LEP students in elementary school each cohort studied. At the middle school level, NSOL grade retention rates were $3.5 \%$ for the first cohort, $4.7 \%$ for the second cohort, and $3.4 \%$ for the third cohort. Grade retention rates for NSOL English proficient students were two to three times lower for each cohort than for NSOL LEP students in middle school. For example, in the most recent cohort, grade retention rates were 2.6\% for English proficient students and 6.1\% for LEP students. In high school, grade retention rates were the highest of the three grade levels for all NSOL students. They rose two percentage points during the study from 12.2\% to $14.2 \%$. While the rates remained steady for English proficient students around $10 \%$, they were not only much higher but also increased dramatically, from $17.2 \%$ in the first cohort to $26.4 \%$ in the third cohort.

Table 24. NSOL Grade Retention Rates. Selected Populations. Boston Public Schools, AY2003-AY2006

|  |  | AY2003 to AY2004 | AY2004 to AY2005 | AY2005 to AY2006 |
| ---: | ---: | :--- | :--- | :--- |
| All NSOL | EP | $6.2 \%$ | $8.4 \%$ | $8.7 \%$ |
|  | LEP | $12.1 \%$ | $6.4 \%$ | $6.4 \%$ |
|  | EP | $5.2 \%$ | $13.1 \%$ | $13.1 \%$ |
|  | LEP | $10.6 \%$ | $6.7 \%$ | $6.8 \%$ |
|  |  | $3.5 \%$ | $3.8 \%$ | $4.5 \%$ |
|  | EP | $2.8 \%$ | $10.6 \%$ | $8.9 \%$ |
| Middle School NSOL | LEP | $6.0 \%$ | $4.7 \%$ | $3.4 \%$ |
|  |  | $12.2 \%$ | $3.8 \%$ | $2.6 \%$ |
|  | EP | $9.9 \%$ | $8.6 \%$ | $6.1 \%$ |
| High School NSOL | LEP | $17.2 \%$ | $12.7 \%$ | $14.2 \%$ |
|  |  | $10.4 \%$ | $10.2 \%$ |  |
|  |  | $20.4 \%$ | $26.4 \%$ |  |

Notes: (1) Differences in grade retention rates between NSOL students who are EP or designated as LEP are statistically significant (Chi2 Test $\mathrm{P}<.000$ for AY2004 and AY2006 $\mathrm{P}=.04$ for AY2005). (2) Differences in grade retention rates between NSOL students who are EP or designated as LEP are statistically significant at all levels for all cohorts (Chi2 Test $\mathrm{P}<.000$ ).

Figure 6. NSOL High School Grade Retention Rates. Boston Public Schools, AY2003-AY2006


In summary, among NSOL students, English proficient and LEP students posted different grade retention rates. LEP student grade retention rates exceeded the BPS average at all grade levels each year of the study. English proficient students had steady grade retention rates over the study period, as did LEP students at elementary and middle levels. However, at the high school level, LEP student grade retention rates not only started at almost twice the rate of English proficient students, they increased by $53 \%$ from the first to the third cohort.

## 4. Transfer

Overall transfer rates among NSOL students were between $5 \%$ and $6 \%$ during the study period. For NSOL students proficient in English, transfer rates started at $6.8 \%$ and declined to 4.8\%. For NSOL students designated as LEP, transfer rates started at $3.8 \%$ and rose to $6.5 \%$. Therefore, while the aggregate transfer rates stayed relatively stable, each subgroup of NSOL students behaved differently.

### 4.1 Transfers by Grade Level

At the elementary level, transfer rates among NSOL students were between $5 \%$ and $6 \%$ during the study period. Similar to the overall trend, for NSOL students proficient in English, transfer rates declined ( $6.9 \%$ to $5.0 \%$ ) and for those designated as LEP, transfer rates increased ( $3.8 \%$ to $5.8 \%$ ). At the middle school level, overall transfer rates among NSOL students increased from $4.4 \%$ to $5.1 \%$ during the study period. NSOL students proficient in English had stable transfer rates of about $4.8 \%$, while LEP students had transfer rates that increased from $3.8 \%$ to a high of $7.5 \%$ in year 3 and $6.3 \%$ in year 4 . High school transfer rates behaved very similarly to elementary school transfer rates, in that the overall NSOL rate remained steady during the study period, masking a troubling increase (more than a doubling) of transfer rates among NSOL students who were LEP.

Table 25. NSOL Transfer Rates. Selected Populations. Boston Public Schools, AY2003-AY2006

|  | AY2003 | AY2004 | AY2005 | AY2006 |
| :---: | :---: | :---: | :---: | :---: |
| All NSOL | 5.2\% | 5.5\% | 5.7\% | 5.5\% |
| EP | 6.8\% | 6.0\% | 5.1\% | 4.8\% |
| LEP | 3.8\% | 4.7\% | 6.8\% | 6.5\% |
| Elementary School NSOL | 5.2\% | 5.4\% | 5.7\% | 5.4\% |
| EP | 6.9\% | 6.5\% | 5.2\% | 5.0\% |
| LEP | 3.8\% | 4.2\% | 6.3\% | 5.8\% |
| Middle School NSOL | 4.4\% | 4.9\% | 5.3\% | 5.1\% |
| EP | 4.8\% | 4.7\% | 4.8\% | 4.6\% |
| LEP | 3.8\% | 5.4\% | 7.5\% | 6.3\% |
| High School NSOL | 5.8\% | 6.0\% | 5.8\% | 5.8\% |
| EP | 8.8\% | 6.4\% | 5.2\% | 4.7\% |
| LEP | 3.9\% | 5.2\% | 7.5\% | 8.3\% |

Notes: (1) Differences in transfer rates between NSOL students who are EP or designated as LEP are statistically significant (Chi2 Test $\mathrm{P}<.000$ ) for all years. (2) Differences in transfer rates between NSOL students who are EP or designated as LEP are statistically significant (Chi2 Test $\mathrm{P}<.000$ ) for elementary and middle school in AY2003. (3) At every grade level, differences in transfer rates between NSOL students who are EP or designated as LEP in AY2004 and AY2005 are statistically significant (Chi2 Test $\mathrm{P}<.01$ ). Differences in transfer rates for AY2006 are only statistically significant at the middle school level (Chi2 Test $\mathrm{P}=.003$ middle school).

Figure 7. NSOL High School Transfer Rates. Boston Public Schools, AY2003-AY2006


In summary, among NSOL students, transfer rates stayed roughly the same over the study period, but upon further disaggregation, transfer rates were different for English proficient and LEP students. At the elementary and even more so at the high school level, while English proficient students started the study period with higher transfer rates than LEP students, by the end of the study period LEP students had higher transfer rates than English proficient students. In high school, transfer rates for LEP students more than doubled.

## 5. Annual Drop-Out Rate

Annual drop-out rates were calculated among middle and high school students. The annual drop-out rate among middle school NSOL students increased during the study period from $0.9 \%$ to $2.6 \%$, with a peak of $3.5 \%$ in AY2005. Both EP and LEP students also peaked in AY2005. Both groups dropped out at significantly higher rates in AY2006 than in AY2003: EP students more than tripled and LEP students more than doubled their drop-out rates. In high school, annual drop-out rates also increased, from $6.5 \%$ to $9.8 \%$ during the study period. However, in contrast to middle school drop-out rates, high school drop-out patterns among the two groups differed. While English proficient high school NSOL students began and ended the study period with similar drop-out rates, LEP high school students experienced dramatic increases in drop-out rates, from $5.0 \%$ to $12.1 \%$, more than doubling.

Table 26. NSOL Drop-Out Rates. Selected Populations. Boston Public Schools, AY2003-AY2006

|  |  | AY2003 | AY2004 | AY2005 | AY2006 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Middle School NSOL |  | 0.9\% | 0.4\% | 3.5\% | 2.6\% |
|  | EP | 0.8\% | 0.5\% | 3.6\% | 2.5\% |
|  | LEP | 1.2\% | 0.2\% | 3.0\% | 2.8\% |
| High School NSOL |  | 6.5\% | 4.6\% | 7.2\% | 9.8\% |
|  | EP | 8.7\% | 5.1\% | 6.0\% | 8.9\% |
|  | LEP | 5.0\% | 3.6\% | 10.4\% | 12.1\% |

Note: Differences in dropout rates between NSOL students who are EP and those designated as LEP are statistically significant in high school for all years (Chi2 Test $\mathrm{P}<.000$ ).

Figure 8. NSOL High School Dropout Rates. Boston Public Schools, AY2003-AY2006


## 6. MCAS Pass Rates

### 6.1 MCAS Grade Four

On the fourth grade ELA MCAS exam, NSOL students passed at rates greater than $70 \%$ in the four years of the study, similar to NES students as noted earlier. However, when disaggregating by English proficiency, a sizable gap of at least 30 percentage points is revealed between English proficient students, who passed at around $86 \%$ throughout the study period, and LEP students, who passed at $52 \%$ at the beginning of the study period and $58 \%$ at the end of the study period.

On the fourth grade Math MCAS exam, NSOL students passed at comparable rates to the ELA exam, from $65 \%$ in the first year of the study to $76 \%$ in the last year of the study. Again, a large gap (about 20 percentage points) between the pass rates of English proficient and LEP students appears upon disaggregation of NSOL students. Both groups improved their pass rates by about 10 percentage points on the Math exam.

Table 27. NSOL Grade 4 MCAS Pass Rates. Selected Populations. Boston Public Schools, AY2003-AY2006

|  |  | AY2003 | AY2004 | AY2005 | AY2006 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Grade 4 ELA MCAS Pass Rate |  |  |  |  |  |
| NSOL Test Takers |  | 70.2\% | 76.4\% | 73.2\% | 74.3\% |
|  | EP | 85.6\% | 86.6\% | 82.9\% | 86.3\% |
|  | LEP | 51.8\% | 50.1\% | 29.6\% | 57.7\% |
| Grade 4 Math MCAS Pass Rate |  |  |  |  |  |
| NSOL Test Takers |  | 65.0\% | 72.7\% | 71.9\% | 75.8\% |
|  | EP | 74.2\% | 80.5\% | 79.3\% | 84.4\% |
|  | LEP | 54.4\% | 52.6\% | 39.0\% | 63.9\% |

Note: All differences between the pass rates of NSOL students who are EP and those designated as LEP are statistically significant (Chi2 Test $\mathrm{P}<.000$ ) for all years.

### 6.2 MCAS Grade Eight

In the eighth grade, findings were similar to those for Grade 4. Overall, there was a slight improvement in pass rates over time in the eighth grade Math exam, from 53\% to 56\%. English proficient NSOL students passed at higher rates than LEP NSOL students. The gaps between EP and LEP pass rates were larger than in the fourth grade exams: 32 percentage points in the first year and 33 percentage points in the last year. Both groups had similar steady rates of passing over the four years.

Table 28. NSOL Grade 8 Math MCAS Pass Rates. Selected Populations. Boston Public Schools, AY2003-AY2006

|  |  | AY2003 | AY2004 | AY2005 | AY2006 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| NSOL Test Takers |  | 52.6\% | 58.9\% | 49.8\% | 55.7\% |
|  | EP | 62.2\% | 66.2\% | 56.9\% | 63.6\% |
|  | LEP | 29.8\% | 27.0\% | 15.5\% | 30.7\% |

Note: All differences between the pass rates of NSOL students who are EP and those designated as LEP are statistically significant (Chi2 Test $\mathrm{P}<.000$ ) for all years.

### 6.3 MCAS Grade Ten

Table 29. NSOL Grade 10 MCAS Pass Rates. Selected Populations. Boston Public Schools, AY2003-AY2006

|  |  | AY2003 | AY2004 | AY2005 | AY2006 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Grade 10 E | CAS Pass |  |  |
| NSOL Test Takers |  | 61.4\% | 57.4\% | 61.2\% | 71.3\% |
|  | EP | 73.9\% | 79.4\% | 77.9\% | 88.4\% |
|  | LEP | 58.2\% | 31.3\% | 35.6\% | 43.6\% |
|  |  | rade 10 N | CAS Pass |  |  |
| NSOL Test Takers |  | 69.1\% | 69.1\% | 62.5\% | 66.2\% |
|  | EP | 64.1\% | 75.2\% | 71.1\% | 76.1\% |
|  | LEP | 70.8\% | 59.7\% | 42.7\% | 45.5\% |

Note: All differences between the pass rates of NSOL students who are EP and those designated as LEP are statistically significant (Chi2 Test $\mathrm{P}<.000$ ) for all years.

On the tenth grade ELA exam, NSOL pass rates increased 10 percentage points, from $61 \%$ to $71 \%$. However, the two subgroups fared differently compared to those subgroups in Grades 4 and 8. While English proficient students improved their pass rates from $74 \%$ to $88 \%$, LEP student pass rates declined from $58 \%$ to $44 \%$ in the same period. The simultaneous improvement and decline of the two groups resulted in a tripling of the percentage point gap between English proficient and LEP students. On the tenth grade Math exam, NSOL pass rates did not change much, starting at $69 \%$ and ending at $66 \%$. Again, the two subgroups posted very different trends during the study period. While English proficient students improved their pass rates from $64 \%$ to $76 \%$, LEP pass rates declined from $71 \%$ to $46 \%$ in the same period. In fact, on this exam, NSOL LEP students started the study period with higher pass rates than NSOL English proficient students, but lost that advantage by year 2.

To summarize, on every indicator examined except attendance and suspensions, English proficient native speakers of other languages outperform LEP students. LEP student outcomes declined on every indicator examined except for attendance. Middle school suspension rates for LEP and English proficient students rose dramatically. In addition, after Question 2, transfer and drop-out rates for LEP students increased at greater rates than for English proficient students. High school transfer rates for LEP students more than doubled, as did annual drop-out rates for high school LEP students. In some grade levels prior to Question 2, LEP students outperformed English proficient students, and by the third year of Question 2 implementation, English proficient students outperformed LEP students.

# Comparison of Educational Outcomes of LEP Students in General Education Programs and in EL Programs 

## COLOR KEY

All BPS
NES
NSOL
EP
LEP
In General Ed
In EL Programs

This section, which compares the outcomes of LEP students in General Education programs with those in EL programs, paints a mixed picture of LEP students and their outcomes based on participation in language service programs. Some specific findings in this section include:

- LEP students in General Education programs had much higher suspension rates than LEP students in EL programs.
- LEP students in General Education programs posted dramatic increases in transfer rates at every grade level, with highs of $5.1 \%$ in elementary, $6.7 \%$ in middle, and $13.1 \%$ in high school.
- High school LEP students posted the highest levels of grade retention, with $20 \%$ of LEP students in General Education programs being retained and 27\% of LEP students in EL programs being retained.
- While middle school drop-out rates for LEP students in General Education programs increased from $2.3 \%$ to $3.7 \%$, they more than tripled for LEP students in EL programs.
- In high school, both LEP groups suffered dramatic increases in drop-out rates, doubling for students in EL programs and tripling for students in General Education.

In general, LEP students in programs for ELs have higher attendance rates, lower suspension rates, and higher fourth and eighth grade MCAS pass rates. However, they have higher transfer rates, higher grade retention rates, and lower tenth grade MCAS pass rates. In addition, their outcomes over time have declined as much or more dramatically than those of LEP students in General Education in middle school suspensions and middle and high school dropouts. Meanwhile, LEP students in General Education posted declining outcomes on almost every indicator examined. While overall LEP student outcomes declined as documented in previous section, there were clearly differential effects of programming on LEP students.

From interviews, documentary, and enrollment data already presented, the placement of students in EL programs clearly underwent a period of inconsistency and confusion during the early years of Question 2 implementation. Just as LEP identification dipped in the first two years of implementation, so did program placement also decline in those years. Therefore, it is important to understand how LEP students fared in EL programs as well as in General Education programs.

The previous section documented the declining outcomes of LEP students as compared with EP students. The analysis in this section divides LEP students into those who are in General Education and those who are in programs for English Learners. LEP students, or those deemed unable to perform ordinary classwork in English, may find themselves in General Education because (1) the family chose to "opt out" or (2) they are English proficient but have not yet been re-assessed or re-designated.

Figure 9. Comparison of Outcomes of LEPs in General Education programs and in Programs for ELs.

| Total | All BPS |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Native Language | NES | NSOL | LEP |  |
| Language <br> Proficiency | EP | EP | Leral | In Gen Ed | | In EL |
| :--- |
| Programs |

## 1. Attendance

Table 30. LEP Median Attendance Rates. Selected Populations. Boston Public Schools, AY2003-AY2006

|  | AY2003 | AY2004 | AY2005 | AY2006 |
| :---: | :---: | :---: | :---: | :---: |
| All LEP | 96.1\% | 95.6\% | 95.6\% | 95.6\% |
| In General Ed | 95.5\% | 95.0\% | 95.6\% | 95.6\% |
| In Programs for ELs | 96.1\% | 96.1\% | 95.9\% | 95.6\% |
| Elementary School LEP | 96.7\% | 96.6\% | 96.6\% | 96.1\% |
| In General Ed | 96.1\% | 96.1\% | 96.1\% | 95.9\% |
| In Programs for ELs | 96.9\% | 96.7\% | 96.6\% | 96.2\% |
| Middle School LEP | 96.1\% | 95.6\% | 95.6\% | 95.5\% |
| In General Ed | 95.8\% | 94.4\% | 93.9\% | 95.0\% |
| In Programs for ELs | 96.1\% | 96.1\% | 96.1\% | 95.6\% |
| High School LEP | 94.0\% | 93.0\% | 92.8\% | 93.1\% |
| In General Ed | 93.9\% | 91.7\% | 90.0\% | 92.4\% |
| In Programs for ELs | 94.4\% | 94.1\% | 93.9\% | 93.2\% |

Notes: (1) All differences in attendance rates for LEP students in General Education and in EL programs are statistically significant ( $\mathrm{M}-\mathrm{W} \mathrm{P}=.00$ ). (2) Differences in attendance rates LEP students in General Education and in EL programs are statistically significant (M-W p<.00) for all years and levels except for middle school in AY2006.

Attendance rates during the study period for LEP students overall were stable at $95.6 \%$. Among LEP students, those in EL programs started the study period attending school at a slightly higher rate and ended the study period attending school at the same rate as those in General Education programs.

### 1.1 Attendance by Grade Level

Elementary school LEP attendance rates were about half a percentage point higher than the LEP average. Similar to the overall trend, elementary students in EL programs attended school at slightly higher rates than elementary LEP students in General Education programs. Middle school LEP attendance rates were a percentage point lower than elementary LEP attendance rates. Within middle school LEP population, the attendance rate of students in EL programs was stable while those in General Education experienced a dip in the middle two years of the study. LEP student attendance rates in high school were the lowest of the three grade levels, around $93 \%$. As at the other grade levels, students in EL programs attended at higher rates than students in General Education. The largest gaps in high school LEP attendance occurred in the middle two years of the study, just as in middle school.

Table 31. LEP Out-of-School Suspension Rates. Selected Populations. Boston Public Schools, AY2003-AY2006

|  | AY2003 | AY2004 | AY2005 | AY2006 |
| :---: | :---: | :---: | :---: | :---: |
| All LEP | 4.2\% | 3.9\% | 3.6\% | 3.5\% |
| In General Ed | 5.2\% | 4.5\% | 4.1\% | 3.9\% |
| In Programs for ELs | 3.7\% | 3.5\% | 3.4\% | 3.5\% |
| Elementary School LEP | 1.8\% | 1.5\% | 1.4\% | 1.5\% |
| In General Ed | 1.8\% | 1.6\% | 1.5\% | 0.7\% |
| In Programs for ELs | 1.8\% | 1.4\% | 1.3\% | 1.6\% |
| Middle School LEP | 8.6\% | 12.4\% | 11.3\% | 12.0\% |
| In General Ed | 12.1\% | 15.9\% | 16.2\% | 19.0\% |
| In Programs for ELs | 7.2\% | 10.6\% | 9.5\% | 11.1\% |
| High School LEP | 5.4\% | 4.2\% | 4.6\% | 3.9\% |
| In General Ed | 5.8\% | 4.9\% | 5.8\% | 7.5\% |
| In Programs for ELs | 4.9\% | 3.6\% | 4.1\% | 3.7\% |

Notes: (1) All differences in suspension rates between LEP students in General Education and in EL programs are statistically significant for all years (Chi2 Test $\mathrm{P}<.01$ ). (2) Differences in suspension rates between LEP students in General Education and in EL programs at the elementary level are statistically significant only in AY2006 (Chi2 Test $\mathrm{P}=.043, \mathrm{P}=.910$ for AY2003, $\mathrm{P}=.543$ for AY2004, and $\mathrm{P}=.596$ for AY2005). (3) Differences in suspension rates between LEP students in General Education and in EL programs are statistically significant at the middle school level for all years (Chi2 Test $\mathrm{P}<.005$ ). Differences in suspension rates between LEP students in General Education and in EL programs at the high school level are statistically significant for AY2006 only (Chi2 Test $\mathrm{P}<.047, \mathrm{P}=.143$ for $\mathrm{AY} 2003, \mathrm{P}=.072$ for $\mathrm{AY} 2004, \mathrm{P}=.077$ for AY 2005 ).

## 2. Out-of-School Suspension

Among LEP students, out-of-school suspension rates gradually decreased during the study period from $4.2 \%$ to $3.5 \%$. LEP students in General Education had higher suspension rates than the average and experienced the same decrease. LEP students in EL programs, on the other hand, had relatively stable and lower suspension rates of around $3.5 \%$.

### 2.1 Suspensions by Grade Level

At the elementary level, suspension rates among LEP students fluctuated slightly and were always under $2 \%$, less than half the average district and LEP rate. While elementary LEP students in General Education posted decreases in suspension rates from $1.8 \%$ to $0.7 \%$ during the study period, elementary LEP students in EL programs had stable, low suspension rates. At the middle level, suspension rates for LEP student increased as stated earlier, from 8.6\% to $12.0 \%$. When LEP students were divided into those in EL programs and those in General Education programs, both groups contributed to the increase. However, LEP students in General Education programs had much higher suspension rates than LEP students in EL programs, showing differences of 5 to 8 percentage points each year of the study. To illustrate, in the final year of the study, middle school LEP students in General Education had 19\% suspension rates while those in EL programs had $11.1 \%$ suspension rates. At the high school level, where LEP students experienced an overall decline in suspension rates from $5.4 \%$ to $3.9 \%$, LEP students in General Education programs posted increases in suspension rates from 5.8\% to $7.5 \%$ while those in EL programs decreased from $4.9 \%$ to $3.7 \%$.

Figure 10. LEP Student Middle School Suspension Rates. Boston Public Schools, AY2003-AY2006


## 3. Grade Retention

For LEP students, grade retention rates were higher than English proficient students, as described in the previous section. The first cohort of LEP students in this study was retained in grade at $12.1 \%$, and the next two cohorts were retained in grade at $13.1 \%$. LEP students in General Education and in EL programs had similar grade retention rates in the first two cohorts. However, in the third cohort, the grade retention rate for LEP students in General Education declined by almost half, while LEP students in EL programs had a grade retention rate of $13.7 \%$.

### 3.1 Grade Retention by Grade Level

At the elementary level, LEP students in General Education and in EL programs had different patterns of grade retention. Students in General Education programs experienced a steady decline in grade retention rates during the study period, from $12.3 \%$ to $6.2 \%$, while those in EL programs experienced consistent rates at around $9 \%$. In middle school, grade retention rates were around $6 \%$ in the first and third cohorts. Middle school LEP students in General Education showed great fluctuation in grade retention, from $5.9 \%$ to $10.7 \%$ back to $5.0 \%$. Middle school LEP students in EL programs experienced much smaller changes, beginning and ending the study period with rates of slightly higher than $6 \%$. In high school, as stated earlier, LEP students posted the highest grade retention rates seen in the study. They also had a high rate of increase, from $17.2 \%$ to $26.4 \%$. Disaggregating by program participation, we find that rates increased for both groups, and ended the study period with $20 \%$ of students in General Education programs being retained compared with $27 \%$ of students in EL programs being retained.

Table 32. LEP Grade Retention Rates. Selected Populations. Boston Public Schools, AY2003-AY2006

|  | AY2003 to AY2004 | AY2004 to AY2005 | AY2005 to AY2006 |  |
| ---: | :--- | :--- | :--- | :--- |
| All LEP | In General Ed | $12.1 \%$ | $13.1 \%$ | $13.1 \%$ |
| In Programs for ELs | $12.1 \%$ | $13.3 \%$ | $7.6 \%$ |  |
| Elementary School LEP | $10.6 \%$ | $13.0 \%$ | $13.7 \%$ |  |
| In General Ed | $12.3 \%$ | $10.6 \%$ | $8.9 \%$ |  |
| In Programs for ELs | $9.4 \%$ | $9.8 \%$ | $6.2 \%$ |  |
| Middle School LEP | $6.0 \%$ | $11.3 \%$ | $9.2 \%$ |  |
| In General Ed | $5.9 \%$ | $8.6 \%$ | $6.1 \%$ |  |
| In Programs for ELs | $6.1 \%$ | $10.7 \%$ | $5.0 \%$ |  |
| High School LEP | $17.2 \%$ | $7.5 \%$ | $6.3 \%$ |  |
| In General Ed | $14.1 \%$ | $20.4 \%$ | $26.4 \%$ |  |
| In Programs for ELs | $20.5 \%$ | $24.7 \%$ | $19.8 \%$ |  |

Notes: (1) Differences in grade retention rates between LEP students in General Education and in EL programs are statistically significant at the .05 alpha level (Chi2 Test $\mathrm{P}=.000$ ). (2) Statistically significant differences in grade retention rates were found for elementary and high school LEP students in General Education and in EL programs in all three cohorts (Chi2 Test $\mathrm{P}<.002$ ). Statistically significant differences were only found for elementary school grade retention rates for LEP students in General Education and in EL programs in the third cohort (Chi2 Test $\mathrm{P}<.002$ ).

## 4. Transfer

In the year before Question 2, transfer rates among LEP students were $3.8 \%$ and they rose during the study period to $6.5 \%$. When examined by participation in EL programs, the trend of increasing transfer rates among LEP students in General Education was profound, starting at $0.1 \%$ and rising to $5.5 \%$, while the transfer rates among LEP students in EL programs started high at $5.8 \%$ and remained high at $6.7 \%$. Transfer rates peaked for both groups in AY2005.

### 4.1 Transfer by Grade Level

At all three grade levels, while students in EL programs transferred at relatively steady rates of $6 \%$ to $9 \%$, LEP students in General Education programs transferred virtually not at all prior to Question 2 but rose in the second and third year of implementation to highs of $5.1 \%$ in elementary, $6.7 \%$ in middle, and $13.1 \%$ in high school.

Table 33. LEP Transfer Rates. Selected Populations. Boston Public Schools, AY2003-AY2006

|  | AY2003 | AY2004 | AY2005 | AY2006 |
| :---: | :---: | :---: | :---: | :---: |
| All LEP | 3.8\% | 4.7\% | 6.8\% | 6.5\% |
| In General Ed | 0.1\% | 1.2\% | 5.8\% | 5.5\% |
| In Programs for ELs | 5.8\% | 7.1\% | 7.3\% | 6.7\% |
| Elementary School LEP | 3.8\% | 4.2\% | 6.3\% | 5.8\% |
| In General Ed | 0.2\% | 1.2\% | 5.1\% | 4.8\% |
| In Programs for ELs | 5.1\% | 6.1\% | 7.0\% | 6.0\% |
| Middle School LEP | 3.8\% | 5.4\% | 7.5\% | 6.3\% |
| In General Ed | 0.0\% | 1.7\% | 6.7\% | 3.9\% |
| In Programs for ELs | 5.3\% | 7.2\% | 7.8\% | 6.6\% |
| High School LEP | 3.9\% | 5.2\% | 7.5\% | 8.3\% |
| In General Ed | 0.0\% | 1.2\% | 7.3\% | 13.1\% |
| In Programs for ELs | 7.4\% | 8.9\% | 7.6\% | 8.1\% |

Notes: (1) Differences in transfer rates between LEP students in General Education and in EL programs are statistically significant (Chi2 Test $\mathrm{P}<.00$ ). (2) All differences in transfer rates between LEP students in General Education and in EL programs are statistically significant at the elementary school and high school level for AY2003 and AY2004 but not the middle school level (Chi2 Test $\mathrm{P}<.02$ ). Differences were not found to be statistically significant in AY2005 and AY2006.

## 5. Annual Drop-Out Rates

In middle school, drop-out rates are very small. However, between the year before Question 2 and the second and third year of implementation, annual middle school drop-out rates more than doubled. In comparing students in General Education with students in EL programs, the drop-out rate among LEP students in General Education programs was higher each year of the study. However, while drop-out rates for LEP students in General Education programs increased from $2.3 \%$ to $3.7 \%$, they more than tripled for LEP students in EL programs.

Table 34. LEP Middle and High School Drop-Out Rates. Selected Populations. Boston Public Schools, AY2003-AY2006

|  | AY2003 | AY2004 | AY2005 | AY2006 |
| ---: | :--- | :--- | :--- | :--- |
| Middle School LEP | $1.2 \%$ | $0.2 \%$ | $3.0 \%$ | $2.8 \%$ |
| In General Ed | $2.3 \%$ | $0.0 \%$ | $3.9 \%$ | $3.7 \%$ |
| In Programs for ELs | $0.8 \%$ | $0.3 \%$ | $2.7 \%$ | $2.7 \%$ |
| High School LEP | $5.0 \%$ | $3.6 \%$ | $10.4 \%$ | $12.1 \%$ |
| In General Ed | $3.5 \%$ | $0.8 \%$ | $13.7 \%$ | $11.9 \%$ |
| In Programs for ELs | $6.3 \%$ | $6.1 \%$ | $9.1 \%$ | $12.1 \%$ |

Notes: (1) Differences in dropout rates between LEP students in General Education and in EL programs are statistically significant (Chi2 Test P<.03) for AY2003 at the middle school level and AY2003, AY2004, AY2005 at the high school level. All other differences in dropout rates are not statistically significant.

In high school, the annual drop-out rate among LEP students more than doubled during the study period. In contrast to the middle school drop-out profile, in high school, LEP students in General Education started the study period with lower rates (3.5\%) than LEP students in EL programs ( $6.3 \%$ ) However, by the end of the study period, the two groups had similar drop-out rates ( $\sim 12 \%$ ). Therefore, both LEP groups suffered dramatic increases in drop-out rates, doubling for students in EL programs and tripling for students in General Education.

Figure 11. LEP Student Annual High School Dropout Rates. Boston Public Schools, AY2003-AY2006


## 6. MCAS Pass Rates

### 6.1 MCAS Grade Four

In Grade 4, average pass rates in the ELA exam for LEP students were $51.8 \%$ in year 1 and $57.6 \%$ in year 4 , an increase of almost six percentage points. However, the two groups posted very different pass rates, with LEP students in programs for ELs passing at higher rates than LEP students in General Education programs. For the Math exam, the general increase in pass rate for LEP students was almost ten percentage points. Similar to the ELA pass rate differences, LEP students in programs for ELs passed at far higher rates than those in General Education.

Table 35. LEP Grade 4 MCAS Pass Rates. Selected Populations. Boston Public Schools, AY2003-AY2006

|  | AY2003 | AY2004 | AY2005 | AY2006 |
| :---: | :---: | :---: | :---: | :---: |
| Grade 4 ELA MCAS Pass Rate |  |  |  |  |
| All LEP Test Takers | 51.8\% | 50.1\% | 29.6\% | 57.6\% |
| In General Ed | 17.9\% | 29.2\% | 34.0\% | - |
| In Programs for ELs | 55.1\% | 57.1\% | - | 56.9\% |
| Grade 4 Math MCAS Pass Rate |  |  |  |  |
| All LEP Test Takers | 54.4\% | 52.6\% | 39.0\% | 63.9\% |
| In General Ed | 29.9\% | 37.1\% | 38.7\% | - |
| In Programs for ELs | 56.7\% | 57.6\% | - | 63.0\% |

Note: (1) MCAS pass rates in AY2005 and AY2006 are not reported for some groups because of low enrollments and restrictions in reporting scores for small groups of students in school or grade. (2) All differences in Grade 4 MCAS scores between LEP students in General Education and in EL programs are statistically significant (Chi2 Test $\mathrm{P}>.000$ except in ELA and Math AY2006, when $\mathrm{P}=.05$ and $\mathrm{P}=.01$ respectively).

### 6.2 MCAS Grade Eight

In Grade 8, LEP students passed the Math MCAS at $30.0 \%$ in the first year of the study and at similar rates in the last year of the study. LEP students in General Education passed at far lower rates than LEP students in EL programs. For example, in AY2004, pass rates for LEP students in General Education were $17.8 \%$ while those for LEP students in EL programs were $31.7 \%$.

Table 36. LEP Grade 8 Math MCAS Pass Rates. Selected Populations. Boston Public Schools, AY2003-AY2006

|  | AY2003 | AY2004 | AY2005 | AY2006 |
| :---: | :---: | :---: | :---: | :---: |
| All LEP Test Takers | 30.0\% | 27.0\% | 15.5\% | 30.7\% |
| In General Ed | 16.4\% | 17.8\% | 7.6\% | - |
| In Programs for ELs | 33.1\% | 31.7\% | - | 33.3\% |

Notes: (1) MCAS pass rates in AY2005 and AY2006 are not reported for some groups because of low enrollments and restrictions in reporting scores for small groups of students in school or grade. (2) Differences in MCAS outcomes for LEP students in General Education and in EL programs were found to be statistically significant (Chi2 Test $\mathrm{P}<.02$ for AY2003, $\mathrm{p}<.006$ for AY2004).

### 6.3 MCAS Grade Ten

In Grade 10, LEP students experienced a decline in ELA and pass rates from the first to the fourth year of the study. A large portion of that decline was experienced in the first year of Question 2 implementation, AY2004. On both ELA and Math exams, while both groups experienced dramatic declines in pass rates from AY2003 to AY2004, pass rates declined for LEP students in General Education more dramatically than they did for LEP students in EL programs. In AY2005, LEP students in General Education passed the ELA exam at a rate 3 percentage points higher than for those in programs for ELs. LEP students in programs for ELS passed the Math exam at higher rates than those in General Education in AY2004 and AY2005.

Table 37. LEP Grade 10 MCAS Pass Rates. Selected Populations. Boston Public Schools, AY2003-AY2006

|  | AY2003 | AY2004 | AY2005 | AY2006 |
| :---: | :---: | :---: | :---: | :---: |
| Grade 10 ELA MCAS Pass Rate |  |  |  |  |
| All LEP Test Takers | 58.2\% | 31.3\% | 35.6\% | 43.5\% |
| In General Ed | 72.8\% | 38.2\% | 37.9\% | - |
| In Programs for ELs | 45.1\% | 26.3\% | 34.7\% | 43.2\% |
| Grade 10 Math MCAS Pass Rate |  |  |  |  |
| All LEP Test Takers | 70.8\% | 59.7\% | 42.7\% | 45.5\% |
| In General Ed | 72.0\% | 55.0\% | 31.9\% | - |
| In Programs for ELs | 69.5\% | 63.4\% | 46.9\% | 45.4\% |

Notes: (1) MCAS pass rates in AY2006 are not reported for LEP students in General Education because of low enrollments and restrictions in reporting scores for small groups of students in school or grade. (2) Differences between LEP students in General Education and in EL programs in Grade 10 MCAS math pass rates are statistically significant (Chi2 Test $\mathrm{P}<.000$; Chi2 Test $\mathrm{P}=.006$ for ELA in AY2004).

In this section, disaggregation of LEP students into those in General Education programs and those in programs for ELs reveals a complex picture of changing outcomes since Question 2 was implemented. This picture is further complicated by differential outcomes by grade level, with older students experiencing the greatest declines. Middle school LEP students in General Education programs experienced the greatest increase in suspension rates of all groups. Transfer rates of LEP students in General Education programs rose sharply after Question 2 at all grade levels. LEP students in General Education programs also posted dramatic rises in annual drop-out rates. Clearly, LEP students in General Education exhibited problems in school engagement and academic performance.

LEP students in EL programs had troubling outcomes, especially in the later grades. For example, more than one quarter of high school students in EL programs were retained in grade in the final year of the study. Middle school drop-out rates for LEP students in EL programs more than tripled, and high school drop-out rates more than doubled. Following the previous chapter, which highlights negative trends for LEP students overall, the findings in this chapter point to further analysis and understanding of the differential outcomes for LEP students who are provided language support services and those who are not.

## Comparison of Educational Outcomes of English Learners with Other Populations of Boston Public School Students

The previous three sections systematically disaggregate student outcomes by native language, English proficiency, and language program participation. In this section, we highlight the outcomes of LEP students in EL programs during the study period in comparison to three groups: NES students, NSOL students who are EP, and LEP students in General Education programs. Key findings were:

- Students in EL programs show higher attendance and lower out-of-school suspension rates than all other groups. They show the highest rates of grade retention; these rates increased in the study period.
- Although all students groups experienced a rise in the drop-out rate during the period of observation, LEPs in EL programs showed the highest increase.
- LEPs, both in EL programs and in General Education had the lowest drop-out rates at the start of the study period. This pattern reversed and by the end of four years, LEPs in EL programs had the highest drop-out rates of all groups, followed closely by LEPs in General Education.
- The dimension of the increase in the drop-out rate among students in EL programs in comparison to that of students in the other groups suggests that the transition to SEI may have been a factor in the increases of the drop-out rates among EL students.
- Although LEPs in EL programs made improvements in their fourth grade ELA and Math pass rates in the four years of observation, pass rates in both areas were low and substantial gaps remain when comparing students in EL programs to groups that are proficient in English.
- Eighth grade Math pass rates were lower for LEPs in EL programs than among English proficient groups and significant gaps remain.
- LEPS in EL programs did not make improvements in their tenth grade pass rates, even as these climbed for English proficient students across most years. Both in ELA and Math, but particularly in Math, LEPs in EL programs lost ground in the four years examined here. This tended to enlarge the gaps between the groups. By AY2006, LEPS in EL programs trailed all other groups in both Math and ELA.

This section focuses on the questions: What are the engagement and academic performance outcomes of students in EL programs and how have these changed in this time period? How do their outcomes compare to those of other BPS sub-populations? The focus populations appear in the bottom row of Figure 5. We compare LEP students in programs for English Learners (rust), with the following groups:

Figure 12. Comparisons of Populations Defined by Native Language and Language Proficiency

| Total | All BPS | NSOL |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Native Language | NES | EP | LEP |  |
| Language <br> Proficiency | EP | In General Education | In Gen Ed | In EL <br> Programs |
| Program <br> Participation | In General Education | NES in General Education | NSOL in General <br> Education | LEP in Gen <br> Ed |
| All Program <br> Participation |  | LEP in EL <br> Programs |  |  |

1. LEP students enrolled in General Education programs (tan)
2. Native speakers of languages other than English who are English proficient (NSOL EP) and are enrolled in General Education programs (dark blue)
3. Native English speakers (NES) enrolled in General Education programs (light green)

The comparison of the outcomes of students in EL programs with NES students in General Education is the most common one when assessing the differential achievement of ELs and other students. Although achievement at the level of a native English speaker is a goal, it is often more helpful (as well as fairer) to assess the programs by comparing the academic outcomes of ELs with those of populations that are closer in linguistic characteristics. The two other comparisons offer different degrees of similarity along the language continuum.

With English proficient NSOL students enrolled in General Education, LEPs in EL programs share the experience of being first- or second-generation im/migrants and of having started their lives immersed in a language other than English. They differ in that English proficient NSOL students arrived in BPS either fully proficient in English or at a level of proficiency that allowed the removal of the designation as LEP.

LEP students enrolled in General Education programs offer the closest comparison to LEPs in programs for ELs. These students include former students of programs for English Learners as well as students who "opted out" of these programs. In both cases, students retained the LEP designation. This group is most similar to students in programs for ELs in that they share the im/migrant experience and also the experience of arriving at BPS without sufficient proficiency in English to perform class work in this language. The difference between them is that, at the time of the comparison, one group was in a program for English Learners while the other was in General Education.

In this section we analyze the educational outcomes of these groups by focusing on the same indicators which were explored in the three previous sections. We assess first the differences between LEPs in EL programs and other groups, noting the extent to which the indicator is affected by differences in language proficiency. We then observe the behavior of all the groups across time, in order to assess changes taking place as the implementation of SEI evolved in Boston.

## 1. Attendance

Table 38. Comparison of Median Attendance Rates. Selected Sub-Populations. Boston Public Schools, AY2003-AY2006

|  | AY2003 | AY2004 | AY2005 | AY2006 |
| :--- | :--- | :--- | :--- | :--- |
| A. All BPS | $95.2 \%$ | $95.0 \%$ | $95.0 \%$ | $95.0 \%$ |
| B. NES in General Education | $94.4 \%$ | $94.4 \%$ | $94.4 \%$ | $94.4 \%$ |
| C. NSOL (EP) in General Education | $96.1 \%$ | $96.1 \%$ | $95.6 \%$ | $95.5 \%$ |
| D. LEP in General Education | $95.5 \%$ | $95.0 \%$ | $95.6 \%$ | $95.6 \%$ |
| E. LEP in EL Programs | $96.1 \%$ | $96.1 \%$ | $95.9 \%$ | $95.6 \%$ |

Note (1) Differences in attendance rates for LEPs in EL programs (Row E) and those in General Education programs (Row D), NSOL (EP) (Row C), and NES (Row B) are statistically significant (M-W P=.00) for all years.

Throughout the time period, LEP students in programs for English Learners sustained the highest levels of attendance of all groups considered here. Their rates were comparable to those of English proficient NSOL students in the first two years of the observation, but then surpassed them slightly in the last two years. NES students showed the lowest levels of attendance in the four years observed here. All the differences in rates between LEPs in EL programs and other groups were found to be statistically significant.

LEP students in programs for ELs and English proficient NSOL students showed the most instability and decline over the four-year period, in spite of their higher rates of attendance. The attendance of LEP students in EL programs decreased from 96.1\% in AY2003 to 95.6\% in AY2006 (Table 38, E). The decline in the rates of English proficient NSOL students was slightly wider (from $96.1 \%$ in AY2003 to $95.5 \%$ in AY2006, as shown in Table 38, C). The rates of LEPs in General Education programs showed the most change, declining in the first year but subsequently rising and surpassing the AY2003 rates. By contrast, the rates for NES students were stable in all four years (Table 38, B).

The volatility observed in only the rates of groups defined by native language and language ability suggests that their attendance rates were affected by measures that touched these groups disproportionately. LEPs in General Education showed the most disruption in attendance, most likely as large numbers were moved to General Education programs in the first year of the implementation of SEI (see p. 40).

## 2. Out-of-School Suspension

During the study period, LEP students in programs for ELs showed the lowest rates of out-ofschool suspension of all groups considered here. The rate of suspensions among NES students is more than double that of the LEPs in EL programs (Table 39, B and E). The rates of English proficient NSOL students and LEPs in General Education occupied the middle between these two extremes. All differences between LEPs in programs for ELs and the other groups were statistically significant, except for the comparison between the two LEP groups in AY2006.

Table 39. Comparison of Out-of-School Suspension Rates. Selected Sub-Populations. Boston Public Schools, AY2003-AY2006

|  | AY2003 | AY2004 | AY2005 | AY2006 |
| :--- | :--- | :--- | :--- | :--- |
| A. All BPS | $7.6 \%$ | $7.1 \%$ | $6.7 \%$ | $6.6 \%$ |
| B. NES in General Education | $9.6 \%$ | $8.7 \%$ | $7.9 \%$ | $7.8 \%$ |
| C. NSOL (EP) in General Education | $5.7 \%$ | $5.7 \%$ | $5.7 \%$ | $5.9 \%$ |
| D. LEP in General Education | $5.2 \%$ | $4.5 \%$ | $4.1 \%$ | $3.9 \%$ |
| E. LEP in EL Programs | $3.7 \%$ | $3.5 \%$ | $3.4 \%$ | $3.5 \%$ |

Note: (1) Differences in the rates of suspension between LEPs in EL programs (Row E) and LEPs in General Education (Row D) are statistically significant at the .05 alpha level (Chi2 Test $\mathrm{P}<.01$ ) for AY2003, AY2004, and AY2005; (2) Differences in the rates of suspension between LEPs in EL programs (Row E) and NSOL (EP) (Row C) and NES (Row B) are statistically significant at the .05 alpha level (Chi2 Test $\mathrm{P}=.000$ ) in all years.

Trends across time show that LEPs in EL programs sustained their low out-of-school suspension rates across the four years. These trends also show that there was change in the rates of the four groups and that, with the exception of English proficient NSOL students, the rates of all groups declined. Nevertheless, there are differences by group in the extent of this improvement. Among LEPs in EL programs, the decline was minimal at two tenths of a percentage point while rates for NES students declined by 1.8 percentage points and those of LEPs in General Education by 1.3 percentage points in the four-year period.

In sum, the out-of-school suspension rate is an indicator where there are significant differences marked by language, with native speakers of English showing much higher rates of suspensions than the other groups. But the comparison of the groups across time trends does not show that suspensions were influenced disproportionately among groups defined by language; NES students and LEPs of both groups show similar patterns across the study period. As was true with attendance, this is an indicator in which LEPs in EL programs outperform other groups. But this performance should be observed with caution since improvement among the native speakers of English took place at a higher rate than among LEPs in EL programs.

## 3. Grade Retention

Table 40. Comparison of Grade Retention Rates. Selected Sub-Populations. Boston Public Schools, AY2003-AY2006

|  | AY2003 to AY2004 | AY2004 to AY2005 | AY2005 to AY2006 |
| :--- | :--- | :--- | :--- |
| A. All BPS | $8.4 \%$ | $8.6 \%$ | $8.9 \%$ |
| B. NES in General Education | $8.7 \%$ | $8.8 \%$ | $8.9 \%$ |
| C. NSOL (EP) in General Education | $6.2 \%$ | $6.4 \%$ | $6.4 \%$ |
| D. LEP in General Education | $12.2 \%$ | $13.3 \%$ | $7.6 \%$ |
| E. LEP in EL Programs | $12.1 \%$ | $13.0 \%$ | $13.7 \%$ |

Note: (1) Differences in grade retention rates between LEPs in EL programs (Row E) and students who are NSOL (EP) (Row C) and NES (Row B) are statistically significant at the .05 alpha level (Chi2 Test $\mathrm{P}=.000$ ) for all years. Differences in grade retention rates between LEPs in EL programs (Row E) and those in General Education (Row D) are statistically significant at the .05 alpha level (Chi2 Test $\mathrm{P}=.000$ ) in AY2006.

Grade retention rates are significantly higher for LEP students in EL programs than for English proficient students throughout the study period. Rates among LEPs in EL programs ranged from $12.1 \%$ in AY2004 to $13.7 \%$ in AY2006 while those of English proficient NSOL students and NES students were below $9 \%$ each year of observation. The differences between LEPs in EL programs and those of NES and English proficient NSOL students are statistically significant and suggest that grade retentions may be an indicator that is sensitive to language differences. The grade retention rates of LEPs in General Education were closer to those of LEPS in EL programs and the differences were not significant except in AY2006, when the retention rate of ELs in General Education dropped considerably.

The behavior of retention rates across time shows, first, that the large differences between English proficient and non-proficient groups were present throughout the study period. Second, the rates showed more volatility among both groups of LEPs than among English proficient groups. Third, retention rates improved over time only for LEPs in General Education programs. And, finally, retention rates among LEPs in EL programs and English proficient NSOL students and increased in the four-year period, but the magnitude of the change was greatest among LEPs in EL programs.

In sum, grade retention is another indicator that shows great differences among groups with different levels of English proficiency. The disparities in retention have been consistent throughout the four-year period but have shown more volatility and higher magnitude among both groups of LEPs. This suggests that retention among these groups may have been affected by changes taking place in this period, and that these changes, although they affected both LEP groups, affected each in a different way. Retention increased among LEPs in EL programs while increasing among those in General Education.

## 4. Transfers

Table 41. Comparison of Transfer Rates. Selected Sub-Populations. Boston Public Schools, AY2003-AY2006

|  | AY2003 | AY2004 | AY2005 | AY2006 |
| :--- | :--- | :--- | :--- | :--- |
| A. All BPS | $7.6 \%$ | $7.1 \%$ | $6.7 \%$ | $6.6 \%$ |
| B. NES in General Education | $9.6 \%$ | $8.7 \%$ | $7.9 \%$ | $7.8 \%$ |
| C. NSOL (EP) in General Education | $5.7 \%$ | $5.7 \%$ | $5.7 \%$ | $5.9 \%$ |
| D. LEP in General Education | $.1 \%$ | $1.2 \%$ | $5.8 \%$ | $5.5 \%$ |
| E. LEP in EL Programs | $5.8 \%$ | $7.1 \%$ | $7.3 \%$ | $6.7 \%$ |

Notes: (1) Differences in transfer rates between LEPs in EL programs (Row E) and those in General Education (Row D) are statistically significant (Chi2 Test $\mathrm{P}_{<.00}$ ) in AY2003, AY2004, and AY2005. (2) Differences in transfer rates between LEPs in EL programs (Row E) and NSOLs (EP) (Row C) are statistically significant (Chi2 Test $\mathrm{P}<.000$ ) in AY2004, AY2005, and AY2006. (3) Differences in transfer rates between LEPs in EL programs (Row E) and NES students (Row B) are statistically significant (Chi2 Test $\mathrm{P}<.01$ ) in AY2004, AY2005, and AY2006.

LEPs in EL programs show transfers rates that are higher than those of English proficient NSOL students and LEPs in General Education but lower than those of NES students. Given the higher rates of poverty and mobility among the immigrant population, the highest rates of transfer would be expected among English proficient NSOL students and LEPs, but in fact it is NES students who show the highest rate of transfers in the four years of the study. The differences between LEPs in EL programs and NES and English proficient NSOL students are significant in the years of the implementation of SEI. The differences between the two groups of LEPs are also significant.

The patterns of the transfer rates over time differed by group. Among LEPs in EL programs, rates increased in the first two years after the implementation of SEI, declining by AY2006 but not reaching the low rates of AY2003 (Table 41, E). Among LEPs in General Education, the pattern was similar but more pronounced: transfer rates increased from $0.1 \%$ in AY2003 to $5.8 \%$ in AY2005, declining to $5.5 \%$ in the last year of observation (Table 41, D). Among English proficient NSOL students, transfer rates were relatively stable but showed a small increase of 0.2 percentage points over the four years (Table 41, C). Transfer rates among NES students have steadily decreased through the four-year period (Table 41, B). Changes in where students attended school, as measured by the transfer rate, seem to have been most prevalent among both LEP groups during this period, as SEI became implemented in the district. LEPs in General Education showed the most change in this period.

Table 42. Comparison of Annual Drop-Out Rates. Selected Sub-Populations. Boston Public Schools, AY2003-2006

|  | AY2003 | AY2004 | AY2005 | AY2006 |
| :--- | :--- | :--- | :--- | :--- |
| A. BPS Middle School | $1.1 \%$ | $0.4 \%$ | $4.0 \%$ | $2.6 \%$ |
| NES in General Education | $1.3 \%$ | $0.4 \%$ | $4.2 \%$ | $2.6 \%$ |
| NSOL (EP) in General Education | $0.9 \%$ | $0.4 \%$ | $3.5 \%$ | $2.6 \%$ |
| LEP in General Education | $2.3 \%$ | $0.0 \%$ | $3.9 \%$ | $3.7 \%$ |
| LEP in EL Programs | $0.8 \%$ | $0.3 \%$ | $2.7 \%$ | $2.7 \%$ |
| B. BPS High School | $7.7 \%$ | $5.3 \%$ | $8.2 \%$ | $10.9 \%$ |
| NES in General Education | $8.7 \%$ | $5.9 \%$ | $9.0 \%$ | $11.7 \%$ |
| NSOL (EP) in General Education | $6.5 \%$ | $4.6 \%$ | $7.2 \%$ | $9.8 \%$ |
| LEP in General Education | $3.5 \%$ | $0.8 \%$ | $13.7 \%$ | $11.9 \%$ |
| LEP in EL Programs | $6.3 \%$ | $6.1 \%$ | $9.1 \%$ | $12.1 \%$ |

Notes: (1) Differences in dropout rates between LEPs in EL programs and LEPs in General Education are statistically significant (Chi2 Test P<.03) in middle school in AY2003 and in high school in AY2003, AY2004, and AY2005; (2) Differences in dropout rates between LEPs in EL programs and NSOL (EP)s are also statistically significant (Chi2 Test $\mathrm{P}<.001$ ) in high school in AY2004, AY2005, and AY2006; and (3) Differences in dropout rates between LEPs in EL programs and NES are statistically significant (Chi2 Test $\mathrm{P}<.000$ ) in high school in AY2003. (4) For this analysis enrolled students who did not attend any days were not excluded.

## 5. Annual Drop-0ut Rates

Several facts mark the behavior of the drop-out rate among BPS students in the period following the implementation of Question 2: first, the high school drop-out rates increased for all groups; second, dropping out increased among middle school students; and third, groups defined by language proficiency showed much higher increases in the drop-out rate at both levels than students who are English proficient.

The drop-out rate among LEPs in middle school in EL programs, at 0.8\%, was the lowest of all groups in AY2003 (under TBE), followed closely by English proficient NSOL and NES students. LEPs in General Education experienced the highest middle school drop-out rate at this time. The differences among the groups changed and by the end of the period, the drop-out rates of LEPS in EL programs were higher than both NES and English proficient NSOL students, although lower than those of LEPs in General Education. The middle school dropout rates tended to increase among all groups. But the highest increase took place among LEPs in EL programs, among whom the drop-out rate tripled in the four years. Among English proficient NSOL students the rates also tripled and they doubled among NES students. LEPs in General Education showed a smaller increase. Although the magnitude of the increase is higher among students in programs for ELs, the difference is small, suggesting that factors other than those affecting ELs most directly may be salient (Table 42, A).
The high school drop-out rate among LEPs in EL programs was lower than those of both English proficient NSOL students and NES students in AY2003, but this reverses beginning in AY2004 and continues this pattern until the end of the observation. The differences between LEPs in EL programs and English proficient NSOL students are statistically significant in the last three years when the difference between them widens. Between ELs and NES students, the difference is significant only in AY2003. The differences between the two LEP groups oscillated more widely but, with the exception of AY2005, the drop-out rate among LEPs in EL programs exceeded that of those in General Education (Table 42, B).

Rates have tended to increase for all groups across time. The largest increases have taken place among LEPs, both in EL programs and in General Education. Among LEPs in EL programs, the drop-out rate has almost doubled (from $6.3 \%$ to $12.1 \%$ ) and among LEPs in General Education it has more than tripled (from $3.5 \%$ to $11.9 \%$ ) in the four-year period.
Although the drop-out rates of all groups rose between AY2003 and 2006, the magnitude of the increase among LEPs-both in General Education and EL programs-suggests the importance of factors that affected these students more directly. It is worthy of note that both groups of LEPs showed the lowest drop-out rates in AY2003, while under TBE. But beginning in AY2004, this pattern was reversed and as the rate for all groups declines in AY2004, the decline in rates was lowest among LEPs in EL programs. Then as the rates for all groups rose again in AY2005, both groups of LEPs showed the highest drop-out rates, with LEPs in General Education showing the highest increases. At the end of the period of observation, LEPs in EL programs show the highest rates of all groups.
Additional analysis of the grade at dropout reveals a divergent pattern for students in EL programs compared with students in General Education programs after the implementation of Question 2: students in EL programs drop out later than students in General Education programs (Uriarte et al., forthcoming). The students in EL programs are more likely to drop out in late high school (Grade 10 or 11) and are less prone to drop out in middle school than their counterparts in regular education programs. Moreover, the percentage of EL program students to drop out in late high school is sizeable, and is higher than the percentage of EL program students who dropped out in early high school (Grade 9 or 10) in two of the study years (Uriarte, et al., forthcoming); this pattern is atypical, as most dropping out occurs in early high school (Stearns \& Glennie, 2006).

## 6. MCAS Pass Rates

In assessing the effect of the implementation of Question 2 on the academic achievement of LEPs in programs for English Learners compared to other groups of students in BPS, we present their pass rates in Grades 4, 8, and 10. In general, pass rates in Grade 4 ELA and Math and in Grade 8 Math have improved for all groups, including LEPs in EL programs. Among high school students, the outcomes are mixed and the pass rates of LEPs in EL programs have declined sharply. In some instances, pass rates may not be reported for either LEPs in General Education or LEPs in EL programs because the low number of test-takers made the data unreliable.

### 6.1 MCAS Grade Four

Table 43. Comparison of MCAS Pass Rates. Selected Sub-Populations. Boston Public Schools, AY2003-2006

|  | AY2003 | AY2004 | AY2005 | AY2006 |
| :---: | :---: | :---: | :---: | :---: |
| A. Grade 4 ELA |  |  |  |  |
| A. All BPS | 73.3\% | 77.5\% | 74.1\% | 73.2\% |
| B. NES in General Education | 75.1\% | 78.1\% | 74.6\% | 72.0\% |
| C. NSOL (EP) in General Education | 85.6\% | 86.6\% | 82.9\% | 86.3\% |
| D. LEP in General Education | 17.9\% | 29.2\% | 34.0\% | - |
| E. LEP in EL Programs | 55.1\% | 57.1\% | - | 56.9 \% |
| B. Grade 4 Math |  |  |  |  |
| A. All BPS | 63.2\% | 70.1\% | 68.5\% | 73.7\% |
| B. NES in General Education | 62.3\% | 68.6\% | 66.5\% | 71.2\% |
| C. NSOL (EP) in General Education | 74.2\% | 80.5\% | 79.3\% | 84.4\% |
| D. LEP in General Education | 29.9\% | 37.1\% | 38.7\% | - |
| E. LEP in EL Programs | 56.7\% | 57.6\% | - | 63.0\% |
| C. Gaps in ELA Pass Rates (percentile points) |  |  |  |  |
| LEP in EL Programs \& NES | 20.0 | 21.0 | - | 15.1 |
| LEP in EL Programs \& NSOL (EP) | 30.5 | 29.5 | - | 29.4 |
| LEP in EL Programs \& in General Education | -37.2 | -27.9 | - | - |
| D. Gaps in Math Pass Rates (percentile points) |  |  |  |  |
| LEP in EL Programs \& NES | 5.6 | 11.0 | - | 8.2 |
| LEP in EL Programs \& NSOL (EP) | 17.5 | 22.9 | - | 21.4 |
| LEP in EL Programs \& in General Education | -26.8 | -20.5 | - | - |

(1) MCAS pass rates In AY2005 for students in EL programs (Row E) and in AY2006 for LEPs in General Education (Row D) are not reliable because of low numbers of test-takers and restrictions in reporting scores for small groups of students in a school or grade. (2) Differences in Grade 4 MCAS ELA scores for students designated as LEP in EL programs (Row E) and those designated as LEP in General Education (Row D) are statistically significant (Chi2 Test P>.000) in AY2003 and AY2004; (3) Differences between LEPs in EL programs (Row E) and English proficient NSOLs (Row C) are statistically significant (Chi2 Test P<.000) for all years. (4) All differences between LEPs in EL programs (Row E) and Native English Speakers (Row B) are statistically significant (Chi2 Test $\mathrm{P}<.000$ ) for all years; AY2003 Math pass rates (Chi2 Test $\mathrm{P}=.011$ ).

The fourth grade ELA pass rates of LEPs in EL programs are lower by more than 20 percentage points than those of NES students and by more than 30 percentage points than those of English proficient NSOL students. These differences are consistent across all years and are statistically significant. In Math, fourth grade pass rates showed a similar pattern: students in EL programs have lower pass rates than both NES and English proficient NSOL students all four years, differences that are also consistent and significant. The comparison between LEP groups is hampered by the lack of reliable data. But across the four years, both ELA and Math pass rates show have been higher among LEPs in EL programs than among those in General Education programs.
Over time, pass rates tended to improve for most groups. Both LEP groups as well as English proficient NSOL students experienced improvements in ELA scores, while native English speakers experienced a slight decline. In Math all groups improved.

In sum, at this level, LEPs in EL programs have made improvement in both their ELA and Math pass rates, but substantial gaps remain in both ELA and Math when compared to groups that are proficient in English (NES and English proficient NSOL). Gaps in Math pass rates are increasing in relation to both groups. By the end of the period, the LEPs in EL programs trailed those in General Education in both Math and ELA as the gaps in the pass rates between these groups expanded.

### 6.2 MCAS Grade Eight

Table 44. Comparison of MCAS Pass Rates. Selected Sub-Populations. Boston Public Schools, AY2003-2006

|  | AY2003 | AY2004 | AY2005 | AY2006 |
| :---: | :---: | :---: | :---: | :---: |
| A. Grade 8 Math |  |  |  |  |
| A. All BPS | 48.1\% | 54.0\% | 51.6\% | 53.4\% |
| B. NES in General Education | 44.7\% | 50.6\% | 52.7\% | 51.9\% |
| C. NSOL (EP) in General Education | 62.2\% | 66.2\% | 56.9\% | 63.6\% |
| D. LEP in General Education | 16.4\% | 17.8\% | 7.6\% | - |
| E. LEP in EL Programs | 33.1\% | 31.7\% | - | 33.3\% |
| B. Gaps in Math Pass Rates (percentile points) |  |  |  |  |
| LEP in EL Programs \& NES | 11.6 | 18.9 | - | 18.6 |
| LEP in EL Programs \& NSOL (EP) | 29.1 | 34.5 | - | 30.3 |
| LEP in EL Programs \& in General Education | -16.7 | -13.9 | - | -14.5 |

(1) MCAS pass rates in AY2005 for students in EL programs (Row E) and in AY2006 for LEPs in General Education (Row D) are not reliable because of low numbers of test-takers and restrictions in reporting scores for small groups of students in a school or grade. (2) All differences in Grade 8 MCAS Math pass rates for LEPs in EL programs (Row E) and those in General Education (Row D) are statistically significant (Chi2 Test $\mathrm{P}=.001$ for AY2003, $\mathrm{P}=.006$ for AY2004) in AY2003 and AY2004. (3) Differences between LEPs in EL programs (Row E) and those of English proficient NSOLs (Row C) and NES in General Education (Row B) are statistically significant (Chi2 Test $\mathrm{P}<.000$ ) in AY2003, AY2004, and AY2006.

Eighth grade Math pass rates were lower for LEPs in EL programs than those of both NES and English proficient NSOL students. In the case of English proficient NSOL students, the differences in rates amounted to about 30 points throughout the period (Table 44, B). The rates for LEPs in EL programs were higher than those for ELs in General Education; among the latter group, whose pass rates did not reach $20 \%$ in those years when data is reliable. Pass rates among LEPs in EL programs were over $30 \%$ in all four years, which is still a very low rate of passing. Pass rates among English proficient NSOL students were the highest of all groups. In general, pass rates for both LEP groups were lower than those of students who are English proficient. The differences between ELs and other groups were significant in every year this difference could be measured.

Between AY2003 and AY2006, pass rates in Math increased among all groups of eighth graders. The increases were widest among those who are English proficient when compared to both groups of LEPs, but particularly those in EL programs. In the four years of observation, NES students increased their pass rates in Math from $44.7 \%$ to $51.9 \%$ and English proficient NSOL students from $62.2 \%$ to $63.6 \%$. In the same period, LEPs in programs for EL improved their pass rates by 0.2 percentage points. In sum, although all groups improved their Math pass rates, the gap between the English proficient and the two groups of LEP students increased in the four years observed here.

### 6.3 MCAS Grade Ten

In both Math and ELA, the tenth grade pass rates of LEPs in EL programs trailed those of NES and English proficient NSOL students across the four years (except in AY2003, when LEPs in EL programs out-performed English proficient NSOL students in Math). The gaps between groups were wide, especially in ELA, where in some cases over 50 points separated the rates of LEPs in EL programs from those of students who are proficient in English. The gaps are widest in the comparison with English proficient NSOL students. All differences in ELA pass rates between LEPs in EL and the two groups of English proficient students are statistically significant; all the differences in Math are also significant (except that between English proficient NSOL students and ELs in Math in AY2003). The comparison of the two LEP groups showed that LEPs in General Education had higher pass rates in ELA throughout the period when compared to LEPs in EL programs. In the case of Math pass rates, this was the case in the in the first year, but the relationship subsequently reversed.

The trends in Grade 10 ELA pass rates between AY2003 and AY2006 showed a clear bifurcation of the pass rates of students who are English proficient students and those who are not. Over the four-year period, ELA pass rates for both NES and English proficient NSOL students increased, in the case of NES students for more than 20 percentage points. ELA rates of both LEP groups declined, but particularly those of LEPs in General Education. In Math the differences were less clear: pass rates for English proficient NSOL students increased but those of NES students, along with those of the two groups of LEPs, decreased.
In sum, at this level, LEPs in EL programs did not make improvements in their pass rates, even as these mostly climbed for English proficient students. Both in ELA and Math, but particularly in Math, LEPs in EL programs lost ground in the four years examined here. This has tended to enlarge the gaps between the groups. By AY2006, LEPs in EL programs trailed all other groups in both Math and ELA.

Table 45. Comparison of MCAS Pass Rates. Selected Sub-Populations. Boston Public Schools, AY2003-2006

|  |  | AY2003 | AY2004 | AY2005 | AY2006 |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | A. Grade 10 ELA |  |  |  |  |
| A. All BPS |  | $65.5 \%$ | $65.9 \%$ | $67.8 \%$ | $77.4 \%$ |
| B. NES in General Education | $62.4 \%$ | $73.9 \%$ | $74.2 \%$ | $83.4 \%$ |  |
| C. NSOL (EP) in General Education | $73.9 \%$ | $79.4 \%$ | $77.9 \%$ | $88.4 \%$ |  |
| D. LEP in General Education | $72.8 \%$ | $38.2 \%$ | $37.9 \%$ | - |  |
| E. LEP in EL Programs | $45.1 \%$ | $26.3 \%$ | $34.7 \%$ | $43.2 \%$ |  |


| A. All BPS | $66.8 \%$ | $68.7 \%$ | $61.1 \%$ | $67.9 \%$ |
| :--- | :--- | :--- | :--- | :--- |
| B. NES in General Education | $72.1 \%$ | $68.5 \%$ | $59.9 \%$ | $69.3 \%$ |
| C. NSOL (EP) in General Education | $64.1 \%$ | $75.2 \%$ | $71.1 \%$ | $76.1 \%$ |
| D. LEP in General Education | $72.0 \%$ | $55.0 \%$ | $31.9 \%$ | - |
| E. LEP in EL Programs | $69.5 \%$ | $63.4 \%$ | $46.9 \%$ | $45.4 \%$ |


| C. Gaps in ELA Pass Rates (percentile points) |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| LEP in EL Programs \& NES | 17.3 | 47.6 | 39.5 | 40.2 |
| LEP in EL Programs \& NSOL (EP) | 28.8 | 53.1 | 43.2 | 45.2 |
| LEP in EL Programs \& in General Education | 27.7 | 11.9 | 3.2 | - |
| D. Gaps in Math Pass Rates (percentile points) |  |  |  |  |
| LEP in EL Programs \& NES | 2.6 | 5.1 | 13.0 | 23.9 |
| LEP in EL Programs \& NSOL (EP) | -5.4 | 11.8 | 24.2 | 30.7 |
| LEP in EL Programs \& in General Education | 2.5 | -8.4 | -15.0 | - |

Notes: (1) Differences in Grade 10 MCAS Math pass rates between LEPs in EL programs (Row E) and those in General Education (Row D) are statistically significant (Chi2 Test P<.000) in AY2003 and AY2004; Differences in Grade 10 MCAS ELA pass rates are significant (Chi2 Test $\mathrm{P}=.006$ ) in AY2004. (2) Differences between LEPs in EL programs (Row E) and English proficient NSOLs (Row C) are statistically significant (Chi2 Test $\mathrm{P}<.000$ ) for ELA pass rates in all years; (3) Differences between LEPs in EL programs (Row E) and English proficient NSOLs (Row C) in Math pass rates are statistically significant for AY2004 (Chi2 Test P<.001), AY2005 (Chi2 Test $\mathrm{P}=.001$ ), and AY2006 (Chi2 Test $\mathrm{P}=.000$ ). (4) Differences between LEPs in EL programs (Row E) and NES students (Row B) in ELA and Math pass rates are statistically significant each year (Chi2 Test $\mathrm{P}<.000$ ); in AY2004 (Chi2 Test $\mathrm{P}=.017$ ). (5) MCAS pass rates In AY2006 for LEP students in General Education are not reliable because of low numbers of test-takers and restrictions in reporting scores for small groups of students in a school or grade.

## Findings and Recommendations

This study assessed the experience of English Learners in one Massachusetts public school district -Boston- in the aftermath of the implementation of Referendum Question 2. The policy change implied the transition from Transitional Bilingual Education to Sheltered English Immersion as the primary model of education for students of limited English proficiency and, therefore, changes in the structure of programs and the delivery of services to over 50,000 students in Massachusetts public schools, $29 \%$ of which attended school in Boston. This section summarizes and discusses the findings and provides recommendations.
We organize this discussion, first, around the questions that framed the study, which result largely in findings and recommendations regarding district policies and practices. But the examination of the impact of the implementation of this state-mandated policy change on a district and its students, also sheds light on broader issues related to state policy and practice. These appear at the end of the section.

1. How have the characteristics of the programs for English Learners changed as BPS made the transition from TBE to SEI? What issues arose in the process of implementation that affected program offerings for ELs?

Change in the characteristics of the programs offered to ELs in Boston and elsewhere in Massachusetts are, first of all, a by-product of the change in policy that mandated the transition from TBE to SEI. This study focused on the organization of programs and in the changes in program enrollment which resulted from the process of implementation. The key findings were the following:

Finding 1. The absolute numbers and the proportion of students identified as of limited English proficiency (LEP) declined 33.9\% between AY2003 and AY2006. This decrease took place in the context of much smaller declines in overall and NSOL enrollment (less than 10\%). Interview evidence points to mis-assessment of students, to inconsistent data collection, and to parents withholding information on native language and home language use as factors in this decline.

Finding 2. The enrollment of LEP students in EL programs declined by $14.8 \%$ during the study period. At the start of the implementation, the district responded to the policy change by moving 4,366 TBE students ( $45.2 \%$ of students who were still designated LEP and in EL programs) into mainstream classrooms, which reduced enrollments. Continued mis-assessment of ELs based contributed to decreasing enrollments. Finally, a sizeable number of students of limited English proficiency, ranging from 4,013 in AY2003 to 1,112 in AY2006, attended General Education programs with minimal, if any, language support.
Finding 3. To minimize the disruption at the start of the program changes in AY2004, former TBE students still in EL programs remained clustered in the same schools, often with their teachers, and their TBE classrooms became sheltered immersion classrooms. Some of these schools eventually became "Centers for English Language Learning (OLLSS, n.d. (a)) and tended to cluster students of the same language group. Other students attended schools that had small
programs for English Learners which in some cases clustered students in language specific SEI classes and in others in multicultural/ multilingual SEI classes (OLLSS, n.d. (b)).

Finding 4. After the implementation of Question in September 2003, an increasing proportion of students are enrolled in Sheltered English Immersion, from $86.8 \%$ in AY2004 to $95.4 \%$ in AY2006. The greatest concentration takes place in high school, where $97 \%$ of students are in an SEI program.

Finding 5. Between AY2003 and AY2006, there was a decline in the amount and type of services available to ELs in Boston, as more and more students became concentrated in Sheltered English Immersion and the district stopped providing language support services to students of limited English proficiency in General Education programs.

Finding 6. The proportion of LEP students in EL programs who participate in Special Education programs has increased at a greater rate than for other populations: from $6.6 \%$ to $9.2 \%$ in the case of full or partial inclusion SPED programs and from $4.8 \%$ to $10.9 \%$ in the case of substantially separate SPED programs.

## Discussion

Boston's experience mirrors that of those California district (Gandara et al., 2000) with a lukewarm attitude to bilingual education, a discouraging approach to parental waivers, and, as a result, a reduction in services and program options for EL students. Boston's lukewarm attitude to bilingual education is well documented in the history of parents' struggle to gain services for their children through the intervention of the courts (Boston Public Schools, 1999). It is reinforced by the fact that, even as the numbers of students of limited English proficiency reached close to one quarter of the district's enrollment, interviewees were almost unanimous in the assessment that there was a pervasive lack of understanding at the highest levels about the most recent information regarding the educational needs and the process of learning for ELs (page 40). The tendency was to view ELs as a compliance issue or, in some cases, as rivals for resources, rather than as a professional challenge: how to meet the needs of a growing group of students with specific learning requirements to ensure that they became successful learners. There were clear concerns about the quality of the programs, confusion about the definition of LEPs, problems with the identification and information management regarding these students, lack of accurate monitoring, and, finally, an Office of Bilingual Programs that, for a variety of reasons, was often disregarded in its assessments of the needs of students and the appropriate approaches to their learning.

Boston's approach to parental waiver rights was also a factor in the reduction of services for students. First of all, Family Resource Centers and schools have not been effective in providing parents with information about their right to request waivers or about the procedure for pursuing them (Citizens' Commission, 2006). The result is that very few parents in Boston seek them, and thus, the district is not compelled to provide alternatives to SEI (in addition to the few seats available in two-way programs). The law gives the opportunity to districts to develop programs in addition to SEI when a number of students in the same grade and school have their waivers approved; this is the mechanism that has allowed other Massachusetts districts to expand their offerings for EL students, as documented by DeJong, Gort, and Cobb (2006). Boston has not availed itself of this opportunity on behalf of its EL students.

At the end of the study period (and still today) parental waiver rights appear conflated with the process of "opting out" which Boston continued from TBE days. Under TBE, parents "opted out" of TBE programs when they wanted their child "immersed" rather than "transitioned" into English. After No Child Left Behind and, especially, after the new Massachusetts law came to be, districts were mandated to monitor the achievement of students of limited English proficiency and provide support to their learning. By the end of the study period, and, indeed well into 2008, Boston did not monitor or provide services to LEP students in General Education programs -those there as part of the process of "opting out" or as a result of transitioning from SEI programs (MDESE, 2008). In this, Boston seems to be out of compliance with both state and federal law.

Both the quantitative data and the interviews with key informants show that there were serious problems in the identification and assessment of students of limited English proficiency. Interviews suggest that under-identification of LEPs took place at the Family Resource Centers, which mis-assessed the English proficiency of students because of the type of testing conducted. Parents were also a source of mis-identification as they failed to report that they children were not native English speakers in order not to have them designated as LEPs and placed in SEI programs. This lack of accurate reporting is a by-product of lack of parental orientation as to their rights under the law to request a waiver of SEI instruction.
A final item in regards to the changes experienced by LEPs in EL program is their increasing participation in Special Education programs. The analysis of enrollments in SPED programs shows a substantial increase in the proportion of LEPs in EL programs who participate in SPED: from $6.6 \%$ to $9.2 \%$ in four years in the case of full or partial inclusion programs and from $4.8 \%$ to $10.9 \%$ in the case of substantially separate SPED programs.

## Recommendations

The environment for English Learners in the district

- Recommendation 1: Develop an institutional culture that is well informed about the best, most recent information regarding the process of learning for ELs and about the requirements for the implementation of SEI through consistent in-service training, professional development and the hiring of new staff with high level of knowledge and expertise.
- Recommendation 2. Develop, codify, and share with the public the district's vision for the education of newcomers. A new and different message about the importance of educating English Learners appropriately must emerge from the top leadership of the district.


## The identification and assessment of students of limited English proficiency

- Recommendation 3. With strong leadership at OLLSS, implement consistent and accurate language proficiency testing, offer evidence-based EL programs, and support accountability measures in line with its vision.
- Recommendation 4. Improve substantially the effectiveness of the district's identification and assessment of students of limited English proficiency.
o Family Resource Centers and Language Assessment Centers, as the first points of contact with families whose home languages are not English,
should have staff trained on the legal and policy issues related to English Learners and capable of conveying to families their rights to bilingual education, LEP designation, and choice of programs.
o Streamline the process of intake and assessment, with clear directions for staff and for families so that referrals among the three Family Resource Centers and the Newcomer Center are not lost in the transition for one center to the other.
o Rectify the assessment procedures for English Learners so that they are appropriately and accurately evaluated for literacy in their native language, for their English proficiency, and for their ability to carry out classroom work in English by conducting the full gamut of testing: English listening, speaking, reading, and writing.
o Develop a consistent way to define, identify, and code students who are LEP so that the databases are accurate and usable for research, evaluation and program planning.

0 Include all grade levels in the Newcomer Center, so that trained assessment staff for English Learners is centralized and available for students at all grade levels. The Newcomer Center should be located in a setting that is easily accessible by public transportation.
o Improve the process of school assignment so that it is guided by accurate student assessment and appropriate program placement.

- Recommendation 5. Inform parents through multiple avenues, such as the BPS website, the Family Resource Centers, the Newcomer Center, community based organizations, and schools, about Question 2, existing program options, waivers and opting out, so that they do not feel the need to withhold information about their children's language ability and use from the system in order to have their children not participate in SEI.


## The participation of LEP students in EL and General Education programs

"Choice" for English Learners means access to an appropriate set of programs, suited to their English language proficiency and their native language proficiency. These choices may run the gamut from English immersion to native language literacy programs and many options in between.

- Recommendation 6. Increase the menu of options for LEP students to include programs for students who use the waiver provision.

0 End the confusion between waivers and opting out among central office staff, intake staff, school leaders, and teachers.
o Cease encouraging families to "opt out", which leaves students without access to English Learner services and programs.
o Educate parents and the public at large about waivers, what they accomplish, and their rights to waivers. Provide them with the opportunity to "waive" out of SEI and into other language programs
0 With a vision of equity and excellence, and the goal of bringing the best programs to the students BPS serves, develop alternative, evidence-based EL programs, particularly for groups of students clustered by language

- Recommendation 7. Develop clear criteria and processes for English Learners to transition from designation as LEP to no longer LEP (English Proficient)
- Recommendation 8. Monitor and support LEPs if they are not in EL programs or when they are re-designated as English proficient, through the use of consistent English proficiency tests, as required by state and federal law.
- Recommendation 9. Provide language support, testing and monitoring to all students of limited English proficiency regardless of the program in which they are enrolled.


## Over-representation of ELs in Special Education programs

- Recommendation 10: Improve the process of assessment of Special Education needs for English Learners.
- Recommendation 11: Recruit and retain teachers and staff who have the language, cultural, and academic expertise to assess whether a learning difficulty is a language need or another service need.


## 2. How have the characteristics of LEP students participating in EL programs changed in this time period in terms of gender, income status, and grade levels?

There has not been a substantial change on the characteristics of students of limited English proficiency and of students in EL programs in the years following the implementation of Question 2. The main findings in this area were:

Finding 7. There is an increase in the proportion of males in EL programs, from 50.6\% in AY2003 to 53.4\% in AY2006.

Finding 8. There is a decrease in the proportion of students receiving a free or reduced price lunch, from 89.9\% in AY2003 to 84.8\% in AY2006.

Finding 9. There is a decline in the proportion of white students, an increase in the proportion of Black students, and a stable enrollment of Asian and Latino students among ELs in Boston during the observation period.

## 3. What are the engagement and academic performance outcomes of English Learners in BPS? What have been the changes after the implementation of Question 2?

In examining the engagement and academic performance of English Learners we focus on the outcomes along a variety of engagement and achievement indicators for LEP students both in General Education programs and in Programs for ELs. The findings were the following:

## Engagement Indicators

## Attendance

Finding 10. LEP students showed higher attendance rates than most other groups, driven by the high rates of attendance of students in EL programs. Students in EL programs showed the highest attendance rates across the four years.

Finding 11. Attendance rates are highest among elementary LEP students and lowest among LEPs in high school.

Finding 12. The rate of attendance among all LEPs declined slightly in the four year period, reflecting a similar decline among LEPs in EL programs. Attendance rates tended to decrease over time for students in EL programs.

## Out-of-school suspension

Finding 13. Students in EL programs have lower out-of school suspensions than all other groups. The out-of-school suspension rate has tended to decrease among all groups, but the decline has been less pronounced among students in EL programs than among the other groups considered here.

Finding 14. Among all LEPs, middle school students have the higher rates of suspension than LEPs in elementary school or high school. Rates among middle schoolers increased from $8.6 \%$ to $12.0 \%$ in the four years of observation.

Finding 15. Although students in EL programs outperform others in this indicator, the weaker decline of the rate in this group may indicate some effect of the implementation of SEI, particularly among middle school students.

## Grade retention

Finding 16. The rate of grade retention has tended to be higher among the two LEP groups than among the English proficient groups showing that there is wide difference in the practice of retention that affects the groups differently.

Finding 17. Grade retention is highest among high school students. Retention in this group increased from 17.2\% to 26.4\% from AY2004 to AY2006.

Finding 18. Grade retention increased among students in EL programs while it has decreased or remained relatively stable among others. At the end of the period of observation, LEPs in EL programs showed the highest rate of retention of all groups.

## Annual Drop-0ut Rate

Finding 19. Native English speakers have tended to show the highest middle school drop-out rates in all but the AY2006, when LEPs in EL programs show the highest rates. LEPs in EL programs had minimal rates during the TBE year of AY2003, the lowest of all groups.

Finding 20. LEPs in EL programs showed the highest rate increase of all groups in the four years of observation. The magnitude of the increase compared to that of others may indicate that the implementation of SEI had an impact in the worsening of the drop-out rate among these middle school students.

Finding 21. Among high school students, both groups of LEPs showed the lowest drop-out rates in AY2003, while under TBE. But beginning in AY2004, this pattern is reversed. At the end of the period of observation, LEPs in EL programs show the highest rates of all groups followed closely by LEPs in General Education.

Finding 22. Although the high school drop-out rate of all groups increased, the increases in the rates of both LEP groups was most pronounced, signaling that there are other factors that affect LEP groups disproportionately contributing to these increases. The dimension of the increase in the drop-out rate of LEP students, whether in EL of General Education programs appears to be a salient effect of the transition to SEI in Boston.

## Discussion

Except for grade retention, indicators related to high incidences of dropping out are not salient among students of limited English proficiency in BPS. In attendance, suspensions and transfer - those indicators where students and their families have most relevance - LEPs outperformed other groups. In the case of grade retention, there seems to be a clear divergence in the experience of LEP students and that of students who are proficient in English. But one would be hard pressed to focus on the high rates of grade retention as the sole cause for the very high drop-out rates among LEPs in Boston.

The Parthenon Report (2006) indicated that late-entrant ELs, or those students who entered BPS as high schoolers in need of language support services, are particularly susceptible to dropping out in Boston's schools. Immersion programs may not be the best choice for these older students. But other institutional factors are also salient.

First, the high-stakes testing regime, which began to be implemented fully in the testing of 10th graders in the Spring of 2001, affected the graduation of students in June 2003. Although MCAS and even the initial implementation of its high stakes component preceded the changes mandated by Question 2, the first class affected by high stakes graduated the summer before the transition between TBE and SEI in Boston. According to interviews, the high-pressure accountability environment affected the choice of high schools to house SEI programs (and in some cases, the treatment of ELs ${ }^{52}$ ) because of concerns about how large concentrations of ELs would affect the academic outcomes for the school. ${ }^{53}$

Second, the lack of training of teachers affected student engagement in schooling. In a recent study of Latino students in BPS, where close to one-third of them are ELs, Uriarte et al. (2008) found that the qualification of teachers was one of the most critical factors in lowering the Latino drop-out rate in Boston's high schools. Unfortunately, the professional development of teachers to address the learning needs of English Learners lagged behind what was required.

## Recommendations

- Recommendation 12. A review of the practice of grade retention among LEP students in EL programs should be undertaken. High rates of grade retention are correlated with high drop-out rates. Because LEPs showed disproportionately high
levels of grade retention compared with other groups (as demonstrated by the divergent rates), BPS should examine closely this practice in relation to LEP students.
- Recommendation 13. Assess the capacity of and provide support to middle school and high schools to mount state-of-the-art dropout prevention programs that: identify risk factors in the early grades, support the development of strategies school by school, and eliminate key risk factors before students enter high school.
- Recommendation 14. Support a family and community education initiative to reduce the dropout rate by focusing on reducing absenteeism; supporting the role of families in maintaining children in school; and expanding access to a broad range of types of after-school programs for middle school students.
- Recommendation 15. Teachers are a key element in increasing the graduation rate and holding down the drop-out rate in schools. The state and the district are responsible for providing the professional development for teachers that will allow them to perform their work with excellence under the new demands of Question 2.
- Recommendation 16. The Boston Public Schools should assess how welcoming the schools are in which LEP students attend General Education and/or SEI classrooms. Interviews revealed serious problems in this regard as high schools re-structured and TBB programs transitioned into SEI as well as continued concerns on the part of school leaders in regards to the "cost" in terms of accountability for housing LEP students. This environment easily spills over to students and create very tense environments for them. Unwelcoming environments are not conducive to student engagement.


## Academic Achievement

Finding 23. LEPs in EL programs have made improvements in both their 4th grade ELA and Math pass rates in the four years of observation. Nevertheless, pass rates in both areas among students in EL programs are low and substantial gaps remain when comparing LEPs in EL programs to groups that are proficient in English.

Finding 24. Eighth grade Math pass rates were lower for LEPs in EL programs than for NES students and English proficient NSOL students. Between AY2003 and AY2006, pass rates in Math increased among most groups of 8th graders, but the improvements were stronger among those who are English proficient when compared to those in EL programs. Significant gaps remain between the pass rates of LEPs in EL programs and those of English proficient groups.

Finding 25. LEPs in EL programs did not make improvements in their 10th grade pass rates, even as pass rates climbed for English proficient students across most years. Both in ELA and Math, but particularly in Math, LEPs in EL programs lost ground in the four years examined here. This decline has tended to enlarge the gaps between the groups. By AY2006, LEPs in EL programs trailed all groups in both Math and ELA pass rates.

## Discussion

Improvement in the academic achievement of students of limited English proficiency was one of the promises of the sponsors of SEI programs in Massachusetts. This study of Boston's English Learners shows that the outcomes in this regard are equivocal at best. Interviews showed that the concern about the academic achievement of LEP students in Boston pre-dated Question 2 and our study gives reason for those concerns as can be seen from the MCAS results for AY2003: ELA and Math pass rates in the fiftieth percentile in grade 4, in the thirtieth percentile in Math in grade 8, in the fortieth percentile in ELA , and in the sixtieth percentile in Math in Grade 10. After the implementation of SEI, there were improvements in the pass rates in both Math and ELA in the early grades, but, by and large, the rise in academic achievement experienced by most sub-groups in BPS bypassed LEPs in EL programs. In the case of the older students, SEI has meant lower achievement and larger gaps in achievement with other groups.

For LEPs in General Education, if possible, the situation has been worse than for students in EL programs. Although LEPs in General Education have seen improvements in 4th grade, their outcomes in the latter grades are worrisome. For example, 10th grade Math pass rates among LEPs in General Education declined from $72 \%$ in AY2003 to $31.9 \%$ in AY2005; a similar decline took place in ELA, signaling that students are placed or choose General Education programs without the English necessary to perform. In light of the lack of services and support for these students after SEI was implemented, such outcomes warrant urgent attention.

Interviewees focused on the lack of clear leadership from the central office in regards to the implementation of SEI instruction and the lack of resources provided for the professional development of teachers. Although the initiative within schools is an important factor in success, this autonomy must be balanced with clear guidance in the face of such massive a change in perspective and practice as that entailed by the transition from TBE to SEI. Otherwise, it is difficult to ensure quality of programs across the district.

Most frequently, interviewees focused on the lack of support for the professional development and ongoing support for teachers as they addressed the challenges of the new methods of instruction: this was true for both TBE teachers transitioning to SEI and General Education teachers now facing students of limited English proficiency in their classrooms. Similar to the finding of Gandara in California, interviewees focused on how confusion about the law and the changes required by Question 2 impacted classroom instruction. Interviewees talked about the confusion about the use of language in the classroom and the slowness of the district in familiarizing SEI teachers (and especially General Education teachers) with the new methods of instruction. ${ }^{54}$ Boston faces a professional development challenge in that, four years after Question 2 passed, only $20 \%$ of its teachers had completed the four category training to qualify them to teach English Learners. Yet, the district enunciated an "every classroom in an SEI classroom" strategy - without fully supporting and funding a widespread professional development program for teachers. The district failed to assure that LEPs, both in EL programs and in General Education classrooms, would be exposed to teachers qualified to teach them. The lackluster academic performance of ELs and the widening gap between ELs and other students in this period is evidence that this failure had dire consequences for Boston's students.

## Recommendations

- Recommendation 17. Review the implementation of Boston's SEI programs at the school and district levels, assessing the resources necessary, the outcomes achieved, and the needs for guidance and for support in relation to the implementation of SEI instruction.
- Recommendation 18. Offer evidence-based programs for ELs, document their implementation, improve the quality and consistency of classroom pedagogy and curriculum, and support appropriate accountability measures for these EL programs.
- Recommendation 19. Distribute programs for English Learners by language, grade level, and zone to reflect Boston's neighborhood compositions. In that way the district will encourage parents to enroll their children in programs for English Learners and discourage the practice of "opting out", which inappropriately places LEP student in General Education classrooms.
- Recommendation 20. Offer and mandate teacher training and qualification on SEI sheltered content instruction and ESL in the 20 hours of professional development which is part of the contract with the Boston Teachers' Union.
- Recommendation 21. Support schools who initiate professional development for all teachers on sheltered content instruction and teaching English as a second language.


## Conclusions and Recommendations Regarding State Policy and Practice

Data from the Massachusetts Department of Elementary and Secondary Education suggest that statewide outcomes for LEP students have also worsened in the time period covered by this study. For example, the drop-out rate among LEP students increased from 6.1\% in AY2003 to $9.5 \%$ in AY2006. While MCAS pass rates in fourth grade ELA and Math have improved, outcomes for eighth and tenth graders have declined and, overall, gaps between ELs and others have not narrowed (MDOE, 2003-2006, 2005, n.d.-a, n.d.-b). Although the declines in the state outcomes have not been as salient as those found in this study of ELs in Boston, the downward trend in the education of this growing group of students must be addressed.

First of all, it is important that State of Massachusetts undertake a study leading to a better understanding of the status and the trends in the education of English Learners in Massachusetts, particularly after the sweeping change in policy and practice that Question 2 represented. Both California and Arizona, the two other states faced with the referendummandated implementation of restrictive language policies in their public schools, have conducted comprehensive studies of the policy's impact on student outcomes (Arizona Department of Education, 2004; Parrish et al., 2006; Wright \& Pu, 2005). There has been no comparable examination in Massachusetts. Although this study examines the impact of the implementation of Question 2 on the state's most populous district and the one with the densest population of students of limited English proficiency, it is limited in its capacity to offer generalizations about ELs across the state. The Massachusetts Department of Elementary and Secondary Education has access to data which would allow such a study.
If the research findings about EL outcomes at the state level are as consistently negative as those documented for Boston students in this study, the state has the responsibility to either radically improve the implementation of SEI or change state policy in regards to the education of English Learners. Although voters forced this change, it was up to policy
makers and state government to execute the voters' mandate in a way that mitigated harm to students. This study found that the distance between policy and implementation was quite large in Boston, both because of the district's own limitations and because of the state's "hands off" approach to the implementation of the policy. Regardless of the opinion one holds about the relative value of different models of instruction, what is clear-and highlighted in this report—is the difficulty of implementing such a rapid and highly disruptive policy change in an urban district already burdened with very complex problems. Neither the legislature nor the DESE took into account the time and resources necessary—particularly the requirements related to the professional development of teachers. In Boston, both teachers and students have paid a high price for that oversight.

Nevertheless, in the five years since the implementation of SEI, there has been ample time to accumulate and share best practices, and to assess and expedite professional development for teachers. There has also been time to assess the differential approaches to parental waivers by districts and the resulting expansion or contraction of programmatic offerings for ELs. We do not assume that all children learn through the same instructional methods, and we should not make that assumption about English Learners. Again, regardless of one's opinion about the policy itself, every effort must be made to improve the experience of schooling of English Learners in Massachusetts under SEI.

If the state's study of English Learners shows that their outcomes continue to lag behind the improvements of other student populations, then it has come time to critically assess the current policy. Such a study would need to address the relative value of immersion (SEI) and transitional additive approaches (TBE, Two-Way bilingual programs) as models of instruction. The study just presented could not make conclusions about these questions because of the lack of comparative data for the TBE period prior to Question 2 and the small number of students in Two-Way programs. At the state level, such a study is possible and the relevant data is available. An understanding of SEI implementation, approaches to waivers, program options, and enrollment trends of English Learners across the state would provide information about how best to serve these students. In addition, research in other states, with and without restrictive language policies, points to several promising program options for English Learners.

Finally, if the state finds that SEI is an inferior model of instruction, as the Boston experience appears to indicate, then the state must speak the truth to the public and work to change the restrictive language policy, expand the evidence-based programmatic options for English Learners, and ensure that teachers are prepared to deliver those options effectively.

## Notes

${ }^{1}$ Defined as those who are receiving free or reduced price lunch.
${ }^{2}$ (1) Differences in dropout rates between LEPs in EL programs and LEPs in General Education are statistically significant (Chi2 Test $\mathrm{P}<.03$ ) in middle school in AY2003. (2) For this analysis enrolled students who did not attend any days were not excluded.
${ }^{3}$ (1) Differences in dropout rates between LEPs in EL programs and LEPs in General Education are statistically significant (Chi2 Test P -.03) in high school in AY2003, AY2004, and AY2005; (2) Differences in dropout rates between LEPs in EL programs and NSOL (EP)s are also statistically significant (Chi2 Test P<.001) in high school in AY2004, AY2005, and AY2006; and (3) Differences in dropout rates between LEPs in EL programs and NES are statistically significant (Chi2 Test $\mathrm{P}<.000$ ) in high school in AY2003. (4) For this analysis enrolled students who did not attend any days were not excluded.
${ }^{4}$ (1) MCAS pass rates in AY2005 for students in EL programs (Row E) and in AY2006 for LEPs in General Education (Row D) are not reliable because of low numbers of test-takers and restrictions in reporting scores for small groups of students in a school or grade. (2) Differences in Grade 4 MCAS ELA scores for students designated as LEP in EL programs and those designated as LEP in General Education are statistically significant (Chi2 Test P>000) in AY2003 and AY2004; (3) All differences between LEPs in EL programs and English proficient NSOLs are statistically significant (Chi2 Test $\mathrm{P}<.000$ ) for all years. (4) All differences between LEPs in EL programs and Native English Speakers are statistically significant (Chi2 Test P<.000) for all years for ELA pass rates.
${ }^{5}$ (1) MCAS pass rates in AY2005 for students in EL programs and in AY2006 for LEPs in General Education are not reliable because of low numbers of test-takers and restrictions in reporting scores for small groups of students in a school or grade. (2) All differences between LEPs in EL programs and English proficient NSOLs are statistically significant (Chi2 Test $\mathrm{P}<.000$ ) for all years. (3) Differences between LEPs in EL programs and Native English Speakers are statistically significant (Chi2 Test P<.011) for AY2003 for Math pass rates.
${ }^{6}$ (1) MCAS pass rates in AY2005 for students in EL programs and in AY2006 for LEPs in General Education are not reliable because of low numbers of test-takers and restrictions in reporting scores for small groups of students in a school or grade. (2) All differences in Grade 8 MCAS Math pass rates for LEPs in EL programs and those in General Education are statistically significant (Chi2 Test $\mathrm{P}=.001$ for AY2003, $\mathrm{P}=.006$ for AY2004) in AY2003 and AY2004. (3) Differences between LEPs in EL programs and those of English proficient NSOLs and NES in General Education are statistically significant (Chi2 Test $\mathrm{P}<.000$ ) in AY2003, AY2004, and AY2006.
${ }^{7}$ (1) Differences in Grade 10 MCAS ELA pass rates are significant (Chi2 Test $\mathrm{P}=.006$ ) in AY2004. (2) Differences between LEPs in EL programs and English proficient NSOLs are statistically significant (Chi2 Test $\mathrm{P}<.000$ ) for ELA pass rates in all years; (3) Differences between LEPs in EL programs and NES students in ELA pass rates are statistically significant each year (Chi2 Test $\mathrm{P}<.000$ ); in AY2004 (Chi2 Test $\mathrm{P}=.017$ ). (4) MCAS pass rates In AY2006 for LEP students in General Education are not reliable because of low numbers of test-takers and restrictions in reporting scores for small groups of students in a school or grade.
${ }^{8}$ (1) Differences in Grade 10 MCAS Math pass rates between LEPs in EL programs and those in General Education are statistically significant (Chi2 Test P<.000) in AY2003 and AY2004; (2) Differences between LEPs in EL programs and English proficient NSOLs in Math pass rates are statistically significant for AY2004 (Chi2 Test $\mathrm{P}<.001$ ), AY2005 (Chi2 Test $\mathrm{P}=.001$ ), and AY2006 (Chi2 Test $\mathrm{P}=.000$ ). (3) Differences between LEPs in EL programs and NES students in Math pass rates are statistically significant each year (Chi2 Test $\mathrm{P}<.000$ ); in AY2004 (Chi2 Test $\mathrm{P}=.017$ ). Differences between LEPs in EL programs and NES students in ELA and Math pass rates are statistically significant each year (Chi2 Test $\mathrm{P}<.000$ ); in AY2004 (Chi2 Test $\mathrm{P}=.017$ ).
${ }^{9}$ For an account of the community-based process that led to TBE in Massachusetts see: www.cpcs.umb. edu/~uriarte/Courses/Critical\%20Readings/bilingualed.htm
${ }^{10}$ Even though during the years covered by this study, the Massachusetts Department of Elementary and Secondary Education (MDESE) was called the Massachusetts Department of Education (Mass DOE), we will refer to the department by its new name throughout the study except in those published references that used the previous name.
${ }^{11}$ It is important to note that there is no way to ascertain this from the quantitative data available, but interviewers were consistent in their assessment that this was the case.
${ }^{12}$ Goldenberg recently reviewed, compared and summarized the findings of two massive, federally-funded meta-analyses conducted by the National Literacy Panel (August \& Shanahan, 2006) and the Center for Research on Education, Diversity and Excellence (CREDE) (Genesee et al., 2006).
${ }^{13}$ MEPA is a test especially designed to measure reading and writing skills in English Learners.
${ }^{14}$ Lau v. Nichols was a class action lawsuit filed by 1,800 Chinese students against the San Francisco Unified School District on the grounds that being educated in a language they did not understand-English-violated their civil rights. The U.S. Supreme Court eventually ruled in favor of Lau.
${ }^{15}$ According to Parrish et al. (2006), ELD prepares teachers to impart ESL and SDAIE involves the training of teachers in imparting grade level subject matter in English specifically designed for speakers of other languages.
${ }^{16}$ Interview S01 (6/09/08).
${ }^{17}$ Interview S01.
${ }^{18}$ Interview S01.
${ }^{19}$ This is Massachusetts General Law Chapter 71A, passed in February 1971.
${ }^{20}$ Interview D05 (7/2/08).
${ }^{21}$ Some researchers contend that bilingual education provides students who are learning English with a protective environment that shields them from negative educational experiences and outcomes, including dropping out (Lutz, 2007; Slavin \& Cheung, 2004; Feliciano, 2001).
${ }^{22}$ Interviews D02 (7/10/08), D03 (5/29/08), D04 (6/12/08), D05, D06 (9/15/08), D09 (11/24/08).
${ }^{23}$ Interviews D02, D03, D04, D06.
${ }^{24}$ Interview D04.
${ }^{25}$ Interview D04.
${ }^{26}$ Interviews D01 (6/20/08), D05, D09.
${ }^{27}$ Interview S01.
${ }^{28}$ Interviews D01, D02.
${ }^{29}$ Interviews D01, D02, D03, D05, D07 (7/1/08).
${ }^{30}$ Interviews D01, D05, D07; Boston Public Schools, 2005, p. 2.
${ }^{31}$ Interviews D03, D05.
${ }_{32}$ Interview D05.
${ }^{33}$ Interview D09.
${ }^{34}$ Lau categories define the level of language acquisition in both first and second language. (Lau A)=Speaks, reads, writes, and understands only the other language(s) and no English; Category B (Lau B)=Speaks, reads, writes, and understands the other language(s) more often than English; Category C (Lau C)=Speaks, reads, writes, and understands the other language(s) and English equally and it is difficult to determine which language is dominant.
${ }_{35}$ Interviews D01, D02, S01.
${ }^{36}$ Interviews D01, D02, D03, D08 (7/08/08), S01.
${ }^{37}$ Interviews D01, D02.
${ }^{38}$ Interviews D03, D07, D08, D09.
${ }^{39}$ Interviews D07, D09
${ }^{40}$ Sheltered Instruction Observation Protocol (SIOP) is a professional development tool widely used in Massachusetts to train content-area teachers to provide sheltered instruction to ELs (Echevarria et al., 2004)
${ }^{41}$ Interview D05.
${ }^{42}$ Interviews D03, D05, D09.
${ }^{43}$ Interviews D01, D09.
${ }^{44}$ Interviews D01, D03, D09.
${ }^{45}$ Interviews D01, D03, D07, D09.
${ }^{46}$ Interviews D03, D07, D08, D09 and Citizens' Commission (2006, p.68).
${ }^{47}$ Interviews D08, D09. FRCs used the Language Proficiency Test Series' listening and speaking tests.
${ }^{48}$ The "Final Report of Findings from Coordinated Program Review" by MDESE (December, 2008), states that an estimated 4000 students were in this situation at the time of the report (p. 32).
${ }^{49}$ Changes in native language groups are addressed in the second report which is part of this publication.
${ }^{50}$ All tests of significance were run at the .05 alpha level.
${ }^{51}$ This rate, though relatively stable, was more than three times that of the state as a whole, where grade retention through these years averaged $2.6 \%$ (MDOE, 2006).
${ }_{52}$ Interview D07.
${ }_{53}$ Interview D03, D07, D09.
${ }^{54}$ Interview D03, D05, D07, D09.

## Appendix: Data, Methods, and Limitations

This study utilizes a combination of quantitative and qualitative methods to assess the programmatic changes in the Boston Public Schools in the aftermath of Question 2 and the effect of this changes on the enrollment, characteristics and outcomes of English Learners in the district.

## Design

The study uses a cross-sectional design to assess the characteristics of students and their outcomes in each of four years. Since data was only available for the year prior to the implementation of Question 2 and the three subsequent years, this is not a standard pre-/post evaluation but rather the design focuses on trends across time for different sub-populations of BPS students and assess the differences along a variety of outcomes indictors between these groups.

## 1. Sources of Data

Administrative Dataset. The quantitative information presented in these reports comes from a four-year, student-level administrative dataset provided by the Boston Public Schools (BPS). For each student enrolled in AYs 2003, 2004, 2005, and 2006, it includes demographic and enrollment information from the Student Information Management System (SIMS) and results from the Massachusetts Comprehensive Assessment System (MCAS) tests. Although the data set includes students' outcomes on Massachusetts English Proficiency Assessment (MEPA), these data were not merged because they were not present in a consistent enough form across years to allow appropriate analyses. All data were received at the individual student level. All four years of SIMS and MCAS data files were cleaned of duplicate lines of data, inconsistent data was reconciled, and new variables were created as needed, without loss of any raw data. Each year's files were then merged into one four-year database. Analyses were performed using both SPSS and Excel.

Documents: In addition to analyzing the dataset received from BPS, researchers collected documentary data pertinent to the process of implementing the changes required by the passage of Question 2. This included a systematic collection of published data from the website of the Mass Department of Elementary and Secondary Education and a non-systematic search of documents pertaining to this period from key informants and sources from the Boston Public Schools.

Interviews. Interviews were conducted with personnel of the Massachusetts Department of Elementary and Secondary Education (one) and the Boston Public Schools (nine) to assess the reasons for the changes observed in the analysis of the quantitative data. Three persons declined being interviewed for the study. Interviews, lasting about 1.5 hours, were conducted during the summer and fall of 2008. Participants were promised and provided full confidentiality. Interviews focused on the identification and assessment of LEPs, the enrollment in programs for ELs, the guidance received by the district from the state and the guidance provided by the district to the schools regarding the implementation of SEI, the experience of the process of transition, and teacher training.

## 2. Populations and Variables (Quantitative Data)

### 2.1 Populations Compared

2.1.1 Final Report. The following figure describes the groups analyzed in the aggregate report. When grouped by their native language, students are classified as native English speakers (NES) or native speakers of other languages (NSOL). When grouped by language proficiency, native speakers of languages other than English are grouped into those who are English proficient (EP) and those who have limited English proficiency (LEP). The term "LEP" is defined by the Massachusetts Department of Elementary and Secondary Education as "not able to perform ordinary classwork in English." When grouped by program participation, students are either in programs for English Learners (In EL Programs) or in General Education (In General Ed). Enrollment, demographic, and outcomes analyses are conducted for each group, by native language, language proficiency, and program participation. The last row compares all four groups of students: NES in General Ed, NSOL EP in General Ed, LEP in General Ed, and LEPs in EL programs.

| Total | All BPS |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Native Language | NES | NSOL | LEP |  |
| Language <br> Proficiency | EP | EP |  |  |
| Program <br> Participation of <br> LEPs | In General Education | In General Education | In Gen Ed | In EL <br> Programs |
| All Program <br> Participation | NES In General Education | NSOL EP in General <br> Education | LEP in Gen <br> Ed | LEP in EL <br> Programs |

- NES LEP students: In analyzing LEP students, the dataset included a small number of students who were coded as native English speakers as well as limited English proficient. The number was small and did not change the outcomes. Given the analysis scheme, the decision was made to leave them with the NES EP group.
- LEP students in General Ed: LEP students in General Education are students who have opted out of programs for English Learners or who have transitioned to General Education but still retain their LEP designation.
- Grade levels: For all except the last row and MCAS results, these analyses are presented for all students in each group as well as disaggregated by grade level. Grade level variables were created as follows:

| Elementary | Grades K0, K1, K2, 1, 2, 3, 4, 5 |
| :--- | :--- |
| Middle | Grades 6, 7, 8 |
| High | Grades $9,10,11,12$ |

For schools that span grade levels, students are analyzed by the grade level they are in. For example, students in a K2-8 school are separated into those in the elementary grades (K2-5) and those in the middle grades (6-8) for the grade level analyses.
2.1.2 Language Groups Report. The language group report includes analyses of the enrollment, program participation, and outcomes of the five largest non-English native language groups: Spanish, Haitian Creole, Vietnamese, Cape Verdean Creole, and Chinese dialects. For the analysis presented in the language group reports, the students who "opted out" of programs for ELs are not included in General Education programs but are part of the total analysis of BPS students. In most tables for the language group reports, we compare the outcomes of EL students from these native language groups with all students in General Education, all students in EL programs, and native speakers of the specific language in General Education. Students who are native speakers of a language other than English but who are in general programs include former students of programs for ELs as well as students who may be native speakers of a language other than English but who were never enrolled in a program for ELs.

### 2.2 Definition of Demographic and Program Participation Variables (both reports)

2.2.1 Demographic Variables. The demographic variables included in the data set included gender, race/ethnicity, native language, and free/reduced price lunch status. Each analysis using a demographic variable represents the proportion of students in that category in the grouping being analyzed. For example, the proportion of Black students who are native English speakers is calculated as the total number of Black students who are NES divided by the total number of NES students.

- Gender-Students are male or female.
- Race/ethnicity—Students are classified into one of five categories: American Indian/Alaska Native; Asian/Pacific Islander; Black; White; or Hispanic. The proportions were calculated for each category. Groups sizes for American Indian/Alaska Native in BPS were too small to report. In AY2006, race/ethnicity reporting categories changed. Variables were created to group students into the original race/ethnicity variables to allow consistent reporting.
- Native language—Students in Boston speak many native languages. The six most frequently cited native languages during the study period were: English, Spanish, Haitian Creole, Vietnamese, Cape Verdean Creole, and Chinese dialects.
- Receiving free/reduced price lunch—Receiving free or reduced price lunch is the most commonly used indicator of the income level of students. In the absence of complete and accurate data on household income, lunch status serves as a proxy for income. The lunch status variable provided was "receiving free lunch" or "receiving reduced price lunch" or "not eligible for either." The first two categories were collapsed into one: "receiving free or reduced price lunch." This variable underestimates the level of poverty in the group, since many students who are eligible by status may not actually receive the service.
- Language proficiency. The language proficiency variable, LEP, was an ill-defined and inconsistently used term in the aftermath of Question 2, as described in this study. However, it is the variable that was used to identify students in need of English Learner services and programs and therefore serves to delineate native speakers of other languages who were English proficient from those who were not. Given what we have learned about mis-assessment, family under-reporting, and lack of common understanding among BPS staff, the LEP variable is an undercount. There are likely to be NSOL EP students in General Education programs who are actually LEP.
- Participation in programs for English Learners. The program participation variables in the data set were re-coded such that LEP students in any program for English Learners were "In EL program" and LEP students who were not in a program were "In General Ed." Students who were coded as "waiver" or "opt out" were re-coded as "In General Ed."
- Participation in Special Education programs. Students are classified into 13 categories in the BPS data set. To reflect predominant practices and simplify reporting, a new variable was created that combined the classifications into three groups: not in Special Education, in partial or full inclusion Special Education, and in substantially separate Special Education.


### 2.3 Definition of Outcomes Variables (both reports)

Using the research literature on effective schools and student outcomes, as well as the available data from the BPS data set, the following outcomes identified to be studied: attendance, suspension, transfer, drop-out, grade retention, and MCAS pass rates. All outcomes variables, except for attendance rates, represent the proportion of students within each school type who reflect that measure. For example, in terms of out-of-school suspensions, the numbers represent the percentage of students within each school type who were suspended in each school year. Median attendance rates were calculated as the days students attended divided by days of membership each year; the median rate is reported.

Outcome variables studied in the language group report mirrored the ones in the aggregate report. The only exception was MCAS outcomes, for which the numbers of test takers from the language groups except Spanish speakers are too small to report.

| Variable | Definition |
| :--- | :--- |
| Attendance rate | Median percentage of days that students attended school in a given <br> year divided by days of membership for each school type each year. |
| Out-of-school suspension rate | The proportion of students who were suspended from school at least <br> once in each school year. |
| Transfer rate | The proportion of students who transferred out of the district in a <br> given school year. This includes students who transferred to any school <br> outside of the Boston Public Schools as well as students who dropped <br> out of school without official notification. |
| Annual drop-out rate | The proportion of students who dropped out of the district in a given <br> school year. This indicator does not exclude 0/1s. |
| Grade retention rate | The proportion of students in a given school year who were not pro- <br> moted to the next grade. |
| MCAS English Language Arts <br> and Math pass rate | The sum of the proportions of students scoring in the advanced, profi- <br> cient, and needs improvement performance categories on the English <br> Language Arts or Math MCAS exams in a given year. |

## 3. Data Organization and Analysis

### 3.1 Quantitative Data

3.1.1 Exclusions: The following two groups of students were excluded from the analysis:

- Students with zero days of attendance and one day of membership. Each analysis excluded students who were enrolled in the district for only one day and/or attended zero days in a year. These students who had zero days of attendance and one day of membership $(0 / 1 \mathrm{~s})$ were excluded because they did not report to the school to which they were assigned; they either dropped out, transferred to another BPS school, or left the system to attend another district, charter, independent school, or home school. Since they represent between $5 \%$ and $10 \%$ of students each year, including them would change the enrollment, demographic, and outcomes profile. The only exception to this exclusion is the annual drop-out rate analysis. Since an unknown proportion of $0 / 1$ s are students who drop out after school assignment, they are included in the dropout analyses.
- Students attending schools serving special populations. Each analysis excluded students who were enrolled in the Carter Center, Community Academy, Expulsion Alternative Program, Horace Mann, McKinley Schools, Middle School Academy, and Young Adult Center. These alternative schools serve students who have not thrived in a traditional classroom setting and/or who have specific medical or learning needs which can not be met in a traditional classroom setting. None of these schools serve English Learners. Their exclusion from our analyses likely leads us to report overall outcomes that are stronger for BPS, NES, and EP students than inclusion would.
3.1.2 Analysis. Basic statistical analyses were conducted to examine the significance of the differences we observed between groups and within the same group over time. Basic cross tabulations and frequencies were used to analyze demographics as well as performance and engagement outcomes based on population variables. In order to assess outcomes for particular populations, program participation variables were used to localize the groups for analysis. Basic statistical tests were used to gauge significance at the .05 alpha level. Chi2 tests were used to analyze all outcomes except for attendance rates. Attendance rates were analyzed using Non parametric testing (Mann-Whitney) as attendance data was not normally distributed.


### 3.2 Qualitative Data.

Interviews were summarized (and in several cases transcribed) and coded as to time and specific topic. Coded material was organized by topic by two different coders and then by time. Material from the documents was then integrated into the interview material.

## Limitations of the Study

Several factors limited the scope of this study. Efforts are underway to address each limitation for future studies.

- This study was not an evaluation of the implementation of Question 2 or SEI programs. Limited resources did not allow us to collect implementation data from individual schools. Such data would answer more of the "why" questions-Why LEP students suffered declining outcomes, why students in EL programs suffered declining outcomes, etc.
- The first year of the data set was AY2003, the year before the implementation of Question 2. Ideally, several years of data prior to Question 2 would confirm that AY2003 data was representative of several years, the final years of TBE implementation. This data was not available to the research team.
- The policy change impacted the programs for the acquisition of English. However, our outcomes measures do not directly address this outcome. The English proficiency test, MEPA, was inconsistently and incompletely administered and the data not kept nor shared well.
- Question 2 passed during a period of other reform implementations which would likely affect the academic progress and school engagement of English Learners. These include the high school restructuring in the district and the accountability measures trickling down through the No Child Left Behind act, such as MCAS becoming a high-stakes exam needed for high school graduation. The study does not take into account these contextual factors, which likely impacted English Learners as well.
- While Boston has the largest number of newcomer students of any district in the state, in the context of the district, the group sizes were small when disaggregating according to our analysis scheme. Caution must be taken when interpreting data from small groups. Statistical significance testing was conducted where possible to illuminate true differences.


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