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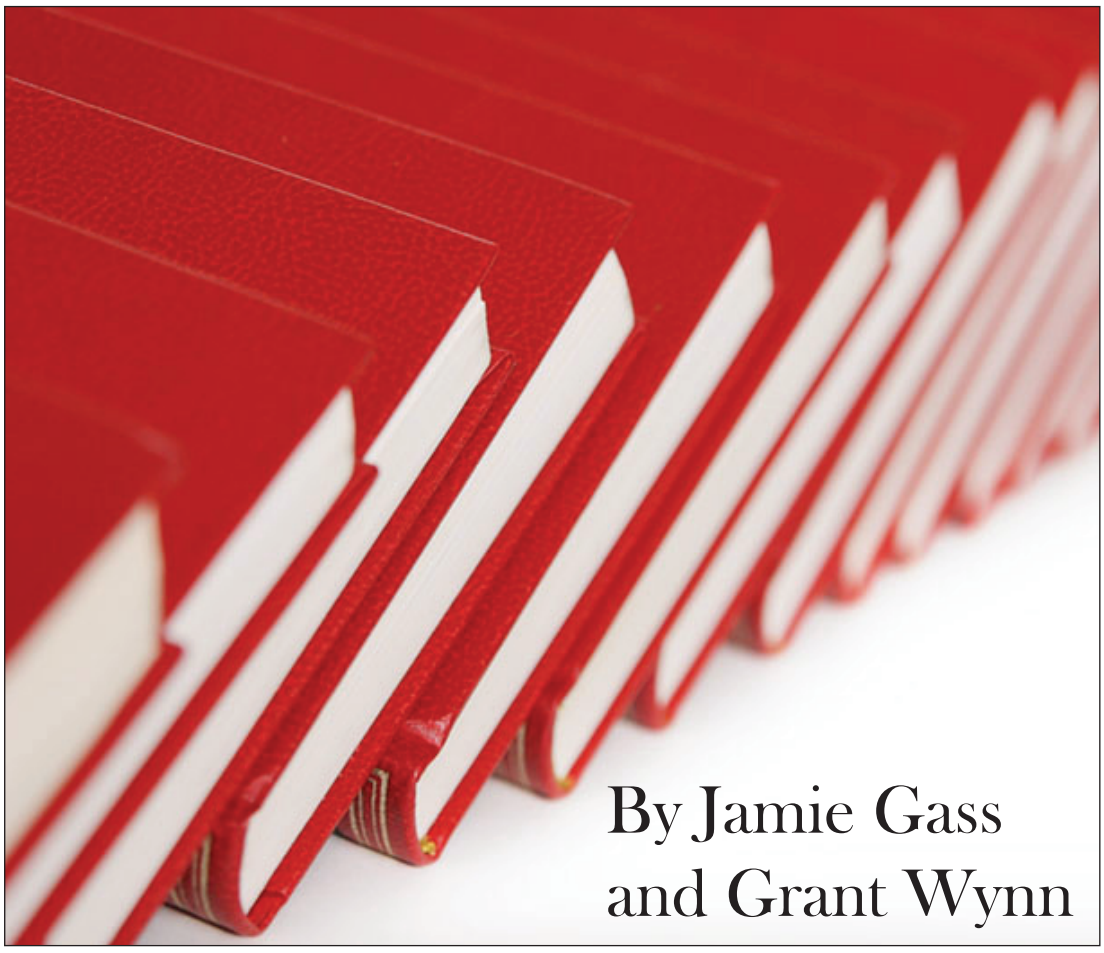
Education Reform in Massachusetts:

Using Student Data to Improve District Performance



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Executive Summary

This study, produced by Pioneer Institute's Center for School Reform, analyzes school district performance assessment data reported by the Massachusetts Office of Educational Quality and Accountability (EQA). This agency regularly audits school districts to evaluate their progress in implementing the reforms articulated by the Massachusetts Education Reform Act of 1993 (MERA).

The MERA heralded a new era in which state government plays an expanded role as arbiter of public education quality in Massachusetts. In return for increased state funding, the MERA asked districts to test student performance as measured against uniform statewide standards.

This study subjects the performance data of 76 school districts (EQA Sample) to detailed analyses. This is the first attempt by independent researchers to disaggregate and draw conclusions from EQA data. The districts that encompass the research sample represent 84 percent of all published EQA technical reports. These reports cover some of the largest districts in Massachusetts, which are also some of the highest-funded and lowest-performing school districts in the state. This study also considers the aggregated Massachusetts Comprehensive Assessment System (MCAS) test scores of, and state Chapter 70 education aid received by, the 76 districts under review. In FY2005 alone, the 76 districts received a total of $1.9 billion, or 61 percent of total state Chapter 70 aid.

Specifically, this study extracts, examines, and analyzes the outcomes for two particular items (called "indicators") in the EQA's technical reports. One indicator exclusively addresses assessment, the other evaluation. It is important to note that the MCAS test measures student performance, while EQA assessment and evaluation indicators measure a district's use of student assessment data to inform and drive improvements in students' academic achievement. Based on our analysis, we have determined that there is a significant gap between state policy and local school district practices regarding the use of student assessment data to drive education reform.

Unfortunately, our study of EQA assessment data demonstrates that most of the 76 districts under review are not taking full advantage of student performance data. Given the sub-standard scores the 76 districts have averaged on the MCAS test, and the sub-par performance assessment data in the EQA Sample's Assessment and Evaluation indicators, there is reason to doubt that districts receiving the highest level of financial support are spending their additional funds wisely. Lack of funding cannot be the only obstacle to improving student achievement. A technical assistance partnership between the state DOE and districts regarding student data is long overdue.

Findings:

The EQA Performance Assessment Data

- Between 2003 and 2005, 58 percent of the EQA Sample districts received a 'Below Satisfactory' performance rating, 34 percent received a 'Satisfactory' performance rating, and 8 percent received an 'Above Satisfactory' performance rating by the EQA for student assessment and evaluation.

- During 2005, 71 percent of the districts reviewed received a 'Below Satisfactory' or lower performance rating by the EQA for student assessment and evaluation.

- Within the EQA Sample, Chelsea was rated 'Above Satisfactory,' Fall River was rated 'Below Satisfactory,' Springfield was rated 'Below Satisfactory,' Boston was rated 'Below Satisfactory,' New Bedford was rated 'Below Satisfactory,' Lowell was rated 'Poor,' and Worcester was rated 'Poor' by the EQA for their combined student data assessment and evaluation.

The MCAS Test Data

- On the 2002-05 MCAS test, 52 percent of the students in the EQA Sample scored in the 'Needs Improvement' and 'Warning/Failing' categories in English language arts (ELA), 14 percentage points higher than that of students statewide.

- On the 2002-05 MCAS tests, an overall average of 65 percent of the students in the EQA Sample scored in the 'Needs Improvement' and 'Warning/Failing' categories of mathematics, 11 percentage points higher than that of students statewide.

- On the 2005 MCAS test, 75 percent of the EQA Sample African-American students scored in the 'Needs Improvement' and 'Warning/Failing' categories, 4 percentage points higher than that of African-American students statewide.

- On the 2005 MCAS test, 78 percent of the EQA Sample Hispanic-American students scored in the 'Needs Improvement' and 'Warning/Failing' categories, 3 percentage points higher than that of Hispanic-American students statewide.

Rates of Chapter 70 Funding

- From FY1993 to FY2005, the Chapter 70 aid for the EQA Sample increased 151 percent, from $770 million in FY1993 to $1.94 billion in FY2005. The total Chapter 70 aid distributed to these 76 selected school districts from FY1993 to FY2005 was $19 billion.

- From FY1993 to FY2005, the Chapter 70 aid for the Springfield Public Schools increased 115 percent, from $100 million in FY1993 to $216 million in FY2005. The total Chapter 70 aid distributed to the Springfield Public Schools from FY1993 to FY2005 was $2.1 billion.

- From FY1993 to FY2005, the Chapter 70 aid for the Boston Public Schools increased 238 percent, from $59 million in FY1993 to $200 million in FY2005. The total Chapter 70 aid distributed to the Boston Public Schools from FY1993 to FY2005 was $1.93 billion.

Policy Recommendations

- As part of school improvement plans, all school districts and schools must indicate the process they will use to analyze data and to use that analysis to inform decision-making and instruction.

- Part of state Chapter 70 funding for each school and district should be earmarked for hiring a district-wide data specialist and the development of data-driven models of school reform. These models should be tied to professional development, on-going review and analysis of the curriculum, and be adopted by each school committee.

Introduction

The purpose of this study is to analyze performance assessment data featured in reports published by the Massachusetts Office of Educational Quality and Accountability. These reports focus on school districts' conformity with the Domain A., Assessment and Evaluation standards, established by the EQA examination process and approved by its governing board, the Educational Management Audit Council (EMAC).

This study seeks to draw broader lessons from the district-specific performance reporting that the EQA has generated. Pioneer Institute reviewed EQA reports from 76 school districts (EQA Sample) representing 84 percent of all EQA reports published up to that time. (See Part Two, The EQA Performance Assessment Data for details.) These reports cover some of the largest districts in Massachusetts, which are also some of the highest-funded and lowest-performing districts in the state.

Specifically, this study extracts, examines, and analyzes the outcomes for two particular items (called "indicators") in the EQA's Technical Reports. One indicator exclusively addresses assessment, the other evaluation. These indicators were explicitly designed to measure a district's use of student assessment data to inform and drive improvements in students' academic achievement.

In addition, this study draws some further conclusions from the aggregated Massachusetts Comprehensive Assessment System (MCAS) test scores and state Chapter 70 education aid of the 76 districts under review. In FY2005 alone, the 76 districts in this EQA Sample received a total of $1.9 billion, or 61 percent of the total state Chapter 70 aid. Furthermore, in the 2005-2006 school year, these 76 districts had a combined enrollment of 392,878 students.

Data and Methodology

As noted above, the data for this study are drawn from district accountability reports produced by the Massachusetts Office of Educational Quality and Accountability. These reports are available at: http://eqa.mass.edu/reports/reports.asp. For a detailed explanation of how these EQA reports were tabulated, please see Appendices A, B, and C.

Part One: Background

Data-Driven Decision Making in Industry and Education

American businesses first began adopting data-driven decision-making, "D^{3}M," in the 1980s, in the face of escalating competition with Germany and Japan, and concerns about military preparedness. However, the root ideas of D^{3}M actually go back to two Americans working independently after the Second World War, Dr. W. Edwards Deming and Armand Feigenbaum. Deming approached American automobile manufacturers at that time with the idea of employing data-driven systems and statistics to inform their managerial decisions. Feigenbaum, a General Electric employee, was developing a similar set of management principles that he called "Total Quality Control," and which he expounded in his landmark 1951 text, "Quality Control: Principles, Practice, and Administration." [1]

Given their enormous advantage in domestic market share in the post-war period, American automobile manufacturers left it to the Japanese to embrace Deming. Building on his ideas, they have been making major incursions into the market share of the domestic automobile manufacturers since the 1970s and 1980s. After selling over 90 percent of all vehicles in this country for decades, the "Big Three" United States automakers-General Motors, Ford, and Chrysler (including the former American Motors) — today sell a mere 62 percent of vehicles purchased in the United States. By contrast, Japanese auto manufacturers have achieved dramatic gains in their share of America's domestic auto market over the past two decades. [2]

The industrialist Malcolm Baldrige, later President Ronald Reagan's Secretary of Commerce, was another major proponent of data-driven systems. Two of his key contributions were to promote investment in data training for leadership teams and the use of customer survey data to ensure product quality and customer satisfaction.

During the 1980s and into the 1990s, the National Governors' Association did important work on the potential for data-driven public sector reform. Building on these efforts, many states began to seriously consider applying D^{3}M to education. An additional impetus came from the "Raising the Bar-Closing the Gap" study commissioned by the Missouri Department of Elementary and Secondary Education in 1997. [3] Subsequently, many educators have applied the Baldrige methodology to education reform. For example, the Missouri Department of Education retained consultants from Baldrige to assist in the development of, among other things, a Senior Leader program. The three-year program used a "train the trainer" model to develop leadership potential in master teachers in curriculum and instruction.

In Massachusetts, since 1993, the Board of Education and Department of Education have been empowered to require schools and districts to evaluate and assess student performance as defined in Chapter 69: Section 1I of the Massachusetts General Laws. However, it was not until the school district accountability phase of education reform began in 2001 that local schools' use of collected and reported data was systematically examined.

In 2001, the EQA developed specific indicators that measured a district's use of disaggregated student assessment data and required districts to use student subgroup data to inform programs and services that affect the quality of teaching and learning such as professional development, budget allocations for human and fiscal resources, and programmatic decisions.

Additional pressure on the state of Massachusetts to gather and disseminate student performance data has been applied by the federal No Child Left Behind (NCLB) Act. Under NCLB, all states are now required to submit to the United States Department of Education a report of all student data disaggregated by federally defined racial and ethnic groups, disabilities, [4] limited English proficiency, economic disadvantages, and gender, among other categories. [5] Disaggregating by subgroup enables educators to review two-year trends, identify patterns indicating low performance, and make appropriate corrections to programs and services.

Nationwide, as in Massachusetts, D[3]M has the potential to generate profound changes in the way students are educated. Data experts have characterized an educator who does not use data to inform decisions for the classroom as "a pilot flying blind." [6] Unfortunately, the Massachusetts EQA's performance assessment data indicate that while districts are collecting data, most of them are not using it to inform decisions in a regular and rigorous way. [7]

Massachusetts Education Reform Act of 1993 and Chapter 70

In 1993, one of the most telling statistics in education was the disparity in per-student funding between districts. The funding disparity among schools had long been evident. This disparity was produced by means of a loosely constructed funding formula that was eventually found unconstitutional by the Massachusetts Supreme Judicial Court in the landmark case of *McDuffy v. Robertson* (1993). The prospect of a judicially-imposed remedy prompted legislators to pass the Massachusetts Education Reform Act, or MERA, which was signed into law by then-Governor William Weld in 1993.

The MERA heralded a new era in which state government was to play an expanded role as arbiter of public education quality in Massachusetts. Mandates for state standards and assessments, curriculum frameworks, school district accountability, charter public schools, and a more equitable system for distributing school funds were among the features of this legislation.

Massachusetts was one of 21 states where plaintiffs used the states' courts to litigate school financing issues between 1989 and 1998.[8] In the majority of suits, alleged violations of articles of the states' constitutions were used to seek statewide equity in school funding, and the decisions rendered by the courts elicited legislative response.

Massachusetts was, in fact, among the few states that, as part of their response to these suits, provided massive supplemental state funding to redress district poverty, distance, or isolation. It chose the path of consolidating educational policy-making and funding, pressuring municipalities to take responsibility for educational funding while providing a highly progressive funding formula to remedy the fiscal inequities among different municipalities.

One of the more dramatic changes was the requirement of a minimum local expenditure for education. In 1994, the allocation of the local "foundation" budget was determined to be roughly $5,500 per student, with adjustments depending on demographics and grade level.

The revenue to reach this minimum level of spending came from two sources: local municipal budgets and state aid. Local communities did vary considerably, of course, in the amount they could afford to contribute, and local payments varied from less than 10 percent of foundation to more than 300 percent.[9] To calculate state aid under the new formula, known as "Chapter 70," districts began with the amount of state funding they had received during the previous year. The majority of new state education aid was then targeted at bringing spending up to foundation level. Once every district reached the minimum level of spending, additional state aid was often distributed, most commonly on a per pupil basis.

Although the state Chapter 70 funding formula was complicated, its goal was simple: to ensure an adequate level of spending in every district in the state. At the same time, the intent was neither to penalize those communities that were contributing more, nor to encourage complacency among those districts that required substantial assistance. Because of the MERA and Chapter 70, state funding for K–12 education more than doubled in less than 10 years, from $1.2 billion in FY1993 to $2.8 billion in FY2000. Since FY1993, the Commonwealth of Massachusetts has expended approximately $40 billion on state Chapter 70 aid in support of education reform.

Massachusetts Comprehensive Assessment System and Student Assessment Data

In return for the increased funding, MERA asked districts to test their own performance by testing student performance as measured against uniform statewide standards. The Massachusetts Comprehensive Assessment System test is not an academic standard in itself, but rather one portion of a larger standards-based state assessment system. [10] Individual MCAS tests are given each year in various grades for English language arts, mathematics, reading, science/technology/engineering, and history/social science. Beginning with the class of 2003, the state requires students to score no lower than the 'Needs Improvement' category on the MCAS test in English language arts and mathematics in order to earn a high school diploma.

The MERA and the MCAS test have been the major impetus for the use of student assessment data in the Commonwealth. Prior to MERA and the MCAS test, when data were used, it was because of the individual initiative of a single staff or faculty member employing elementary spreadsheets and binders with raw test scores from the SAT, Iowa Tests of Basic Skills, or Stanford 9. Disaggregating the data according to the subgroups mandated by the federal NCLB had not been possible. Since the enactment of the MERA in 1993, school districts and the state Department of Education (DOE) have begun to collect and analyze a variety of data regarding the demographic composition of students and teachers; statistics on student enrollments, attendance, dropouts, expulsions, in-school and out-of-school suspensions, truancies; and annual budgets and district expenditures.

The MCAS tests were first administered in 1998. As the MCAS test graduation requirements for the class of 2003 approached, the use of student assessment data increased in school districts. Three major developments also occurred in the average school district over this period: first, parents became aware of MCAS test results through the media and reporting by schools and districts; second, standards-based education linked to the state curriculum frameworks were implemented; and third, remedial classes were established for 10th grade students who did not pass the MCAS test as 9th graders.

From the beginning of MCAS testing, state Board of Education meetings, and on-going meetings of school districts, the Massachusetts DOE, and parent groups would periodically be devoted exclusively to discussing the test. At the meetings, stakeholders became familiar with the Massachusetts curriculum frameworks, the importance of aligning locally generated curricula with new, statewide academic standards, and the role of student assessment data in driving education reforms. Discussion at the meetings frequently focused on the efficacy and implementation of standardized tests. Lawmakers, policymakers, district officials, teachers, parents, and students eventually learned the terminology used in reporting MCAS test results, so that even critics of the MCAS test became knowledgeable about the use of the student assessment data in education reform.[11]

In 2003 and 2004, many districts in Massachusetts, including Barnstable, Hudson, Lowell, Whittier Regional Vocational Technical High School, Worcester, as well as charter public schools statewide and others, made firm district-level commitments in support of educational data analysis. Although some of these districts joined the suburban communities of greater Boston and larger urban districts in their fight against the MCAS test, other districts, such as Barnstable and Lowell, established district-wide positions for assembling, disaggregating, and analyzing student assessment data.[12] Rather than simply collecting data to meet state mandates, these districts actively used that data to inform decision-making and teaching.

The MCAS test data were used to assign schools and districts an accountability status, as defined by state legislation prior to NCLB. However, federal requirements for Title I school-wide reading programs and the NCLB guidelines for school improvement status provide the regulatory frameworks for the use of data. Districts receive specific item-level responses for particular MCAS test questions for each student, classroom, school, and grade level, as well as the released MCAS test questions. The Massachusetts DOE provides training in using the analysis of MCAS test items to inform school planning, targeting mostly low-performing schools.[13] The state DOE reading office

provides schools with funding for and training in reading assessments. Its math office has recently begun providing funding and training to schools for the Galileo math assessment. The state Office of Language Acquisition and the assessment unit have developed the Massachusetts English Proficiency Assessment (MEPA) test of English proficiency for limited English proficient students.[14]

In February 2006, the DOE contracted with the Cognos Corporation to build a $5.2 million, multi-year pilot data warehouse that would make data and data analysis more accessible to schools and districts.[15] Phase One of the pilot will enable various DOE staff members and 35 pilot districts to make use of the Cognos tools to analyze and report on four years of the Student Information Management System (SIMS) and MCAS test data. The DOE has funded one project that "is designed to shift participating districts from data compliant to data driven decision-making organizations that address achievement gaps in at-risk populations and improve teaching and learning across the board."[16] This project has two major objectives: implementation of a data warehouse and creation of a culture of data usage. Education research indicates that both are critical to improving student achievement. At the same time, Learning Innovations at WestEd is helping districts build a focused data culture with the ultimate goal of "using and analyzing data to improve teaching and learning."[17] It is recognized that data must be presented in a useable form. Nevertheless, as one district official commented about the development of the state's immense data warehouse, "School districts need ten or fifteen defined pieces of data to help kids improve, not one hundred."

The Office of Educational Quality and Accountability

The Massachusetts Legislature established the Office of Educational Quality and Accountability in 2000 as part of the accountability system required by MERA. Under the authority of the Educational Management Audit Council (EMAC), its independent governing board, this small agency of approximately 10 full-time staff members and 25 part-time examiners regularly conducts independent audits of school districts to evaluate their progress in implementing the reforms articulated by MERA. Given that state funding for education has more than doubled and exceeded $40 billion since enactment of MERA, it is only prudent that an independent fact-finding and audit agency comprehensively evaluate the financial and educational results of this spending.

Since its first district assessment in 2002, the EQA has evaluated more than 130 school districts, some more than once. These districts include most of the previously under-funded districts that are now receiving the majority of state aid, which are also the largest metropolitan districts.

Each year, the EQA analyzes district data for all schools and school districts in the Commonwealth. Approximately 50 to 60 districts are then selected for further review and on-site visits. Those selected include urban, suburban, and rural districts, as well as regional, vocational-technical, and single-community K-12 districts. Sixty percent of the districts selected for further review are 'Low Performing,' or significantly below the state average performance level on the MCAS test. The remaining 40 percent are selected randomly. Districts are generally not re-visited if their number is chosen a second time, unless there are compelling reasons to do so. A small minority of the districts, approximately three percent, are reviewed at the request of superintendents, school committees, or local officials. The EQA honors these requests as funds permit.

Part Two:
Cross-Sectional Analysis of District Accountability Reports

The EQA Performance Assessment Data

This section will summarize the performance assessment outcomes of 76 individual districts as reported by the EQA. The focus is on items specific to Domain A., Assessment and Evaluation, and the standard S1-Student Assessment. These 76 districts represent 84 percent of the 91 reports that the EQA had published at the time of this study. Of those 91 reports, 15 were not included in the analysis because: (a) the district was reviewed more than once, in which case only the most recent report was used; (b) a rating scale was not featured; or (c) other reasons (see Appendix B).

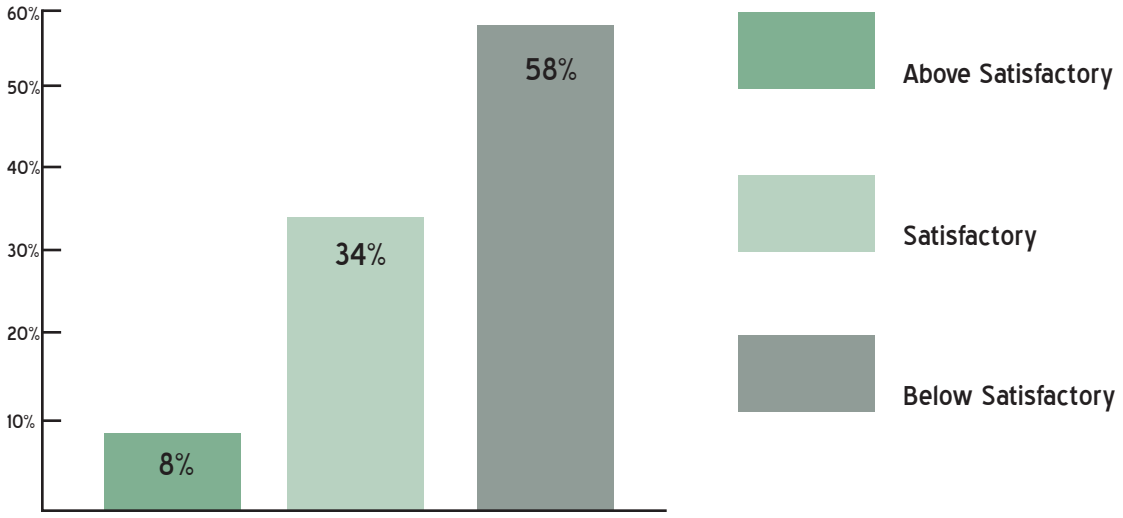
The S1-Student Assessment standard was measured in the EQA Reports using seven (2005) or eight (2003-04) Indicators on a rating scale with four outcomes: 'Excellent,' 'Satisfactory,' 'Poor,' and 'Unsatisfactory.' For the sake of clarity, 3, 2, 1, and 0 respectively were used to represent these ratings.

The measure of the districts' student assessment and evaluation practices is explicitly addressed in two of the S1 Indicators, as illustrated by the extracts below (See Appendix C for the complete text of all Domain A., S1 Indicators):

- Student Assessment: In order to improve achievement for all students, the district used aggregated and disaggregated assessment scores to assess student progress for all populations. Student performance has improved across all subgroups.

- Student Evaluation: In addition to MCAS tests, the district regularly employed the use of standardized tests, local benchmarks, or other assessments to measure the progress of all student populations at regular intervals and used these results to measure the effectiveness of achieving district objectives for student learning.

Chart 1. EQA Sample: Assessment and Evaluation Indicators, 2003-2005



- Between 2003 and 2005, 58 percent of the EQA Sample districts received a 'Below Satisfactory' performance rating, 34 percent received a 'Satisfactory' performance rating, and 8 percent received an 'Above Satisfactory' performance rating by the EQA for student assessment and evaluation.

Table 1. EQA Sample: Assessment and Evaluation Indicators, 2003-2004

School District	Assessment	Evaluation	Combined Score
Above Satisfactory or Higher			
Braintree	Excellent (3.0)	Excellent (3.0)	Excellent (3.0)
Needham	Excellent (3.0)	Excellent (3.0)	Excellent (3.0)
Medfield	Excellent (3.0)	Excellent (3.0)	Excellent (3.0)
Chelsea	**Satisfactory (2.0)**	**Excellent (3.0)**	**Above Satisfactory (2.5)**
Harvard	Excellent (3.0)	Satisfactory (2.0)	Above Satisfactory (2.5)
Nauset	Satisfactory (2.0)	Excellent (3.0)	Above Satisfactory (2.5)
Below Satisfactory or Lower			
Athol-Royalston	Satisfactory (2.0)	Poor (1.0)	Below Satisfactory (1.5)
Fall River	**Satisfactory (2.0)**	**Poor (1.0)**	**Below Satisfactory (1.5)**
Greater New Bedford	Satisfactory (2.0)	Poor (1.0)	Below Satisfactory (1.5)
Longmeadow	Poor (1.0)	Satisfactory (2.0)	Below Satisfactory (1.5)
Lynn	Satisfactory (2.0)	Poor (1.0)	Below Satisfactory (1.5)
Ralph C. Mahar	Poor (1.0)	Satisfactory (2.0)	Below Satisfactory (1.5)
Randolph	Satisfactory (2.0)	Poor (1.0)	Below Satisfactory (1.5)
Southeastern RVT	Poor (1.0)	Satisfactory (2.0)	Below Satisfactory (1.5)
Springfield	**Satisfactory (2.0)**	**Poor (1.0)**	**Below Satisfactory (1.5)**
Westford	Poor (1.0)	Satisfactory (2.0)	Below Satisfactory (1.5)
Whittier	Satisfactory (2.0)	Poor (1.0)	Below Satisfactory (1.5)
Fitchburg	Poor (1.0)	Poor (1.0)	Poor (1.0)
Greater Fall River	Poor (1.0)	Poor (1.0)	Poor (1.0)
Ware	Poor (1.0)	Poor (1.0)	Poor (1.0)
South Middlesex	Poor (1.0)	Unsatisfactory (0)	Below Poor (0.5)
Southbridge	Unsatisfactory (0)	Poor (1.0)	Below Poor (0.5)
Webster	Unsatisfactory (0)	Poor (1.0)	Below Poor (0.5)
North Adams	n/a	Unsatisfactory (0)	Unsatisfactory (0)
Winchendon	Unsatisfactory (0)	Unsatisfactory (0)	Unsatisfactory (0)
Excellent = 3 Satisfactory = 2 Poor = 1 Unsatisfactory = 0			

- Between 2003 and 2004, 43 EQA reports were published and six of those, or 14 percent of the districts assessed, had an 'Above Satisfactory' or higher conformity with the implementation of measures aimed at student assessment and evaluation.

- Between 2003 and 2004, 47 percent of the districts reviewed received a 'Below Satisfactory' or lower performance assessment by the EQA for student assessment and evaluation.

- Between 2003 and 2004, 39 percent of the districts reviewed received a 'Satisfactory' performance assessment by the EQA for student assessment and evaluation.

Table 2. EQA Sample: Assessment and Evaluation Indicators, 2005

School District	Assessment	Evaluation	Combined Score
Above Satisfactory or Higher	**n/a**		
Below Satisfactory or Lower			
Assabet Valley	Poor (1.0)	Satisfactory (2.0)	Below Satisfactory (1.5)
Barnstable	Poor (1.0)	Satisfactory (2.0)	Below Satisfactory (1.5)
Boston	**Poor (1.0)**	**Satisfactory (2.0)**	**Below Satisfactory (1.5)**
Dighton-Rehobeth	Poor (1.0)	Satisfactory (2.0)	Below Satisfactory (1.5)
Gardner	Poor (1.0)	Satisfactory (2.0)	Below Satisfactory (1.5)
Greater Lowell	Poor (1.0)	Satisfactory (2.0)	Below Satisfactory (1.5)
Mohawk Trail	Poor (1.0)	Satisfactory (2.0)	Below Satisfactory (1.5)
Narragansett	Poor (1.0)	Satisfactory (2.0)	Below Satisfactory (1.5)
Nashoba Valley Tech	Poor (1.0)	Satisfactory (2.0)	Below Satisfactory (1.5)
New Bedford	**Poor (1.0)**	**Satisfactory (2.0)**	**Below Satisfactory (1.5)**
North Attleboro	Poor (1.0)	Satisfactory (2.0)	Below Satisfactory (1.5)
Tantasqua	Poor (1.0)	Satisfactory (2.0)	Below Satisfactory (1.5)
Adams Cheshire	Poor (1.0)	Poor (1.0)	Poor (1.0)
Berkshire Hills	Poor (1.0)	Poor (1.0)	Poor (1.0)
Beverly	Poor (1.0)	Poor (1.0)	Poor (1.0)
Douglas	Poor (1.0)	Poor (1.0)	Poor (1.0)
Easthampton	Poor (1.0)	Poor (1.0)	Poor (1.0)
Greenfield	Poor (1.0)	Poor (1.0)	Poor (1.0)
Leominster	Poor (1.0)	Poor (1.0)	Poor (1.0)
Lowell	**Unsatisfactory (0)**	**Satisfactory (2.0)**	**Poor (1.0)**
Montachusett	Poor (1.0)	Poor (1.0)	Poor (1.0)
Worcester	**Poor (1.0)**	**Poor (1.0)**	**Poor (1.0)**
Berkley	Poor (1.0)	Unsatisfactory (0)	Below Poor (0.5)
Freetown-Lakeville	Poor (1.0)	Unsatisfactory (0)	Below Poor (0.5)
Hampshire	Unsatisfactory (0)	Poor (1.0)	Below Poor (0.5)
Excellent = 3 Satisfactory = 2 Poor = 1 Unsatisfactory = 0			

- In 2005, 34 EQA reports were published, and none of the districts assessed had an 'Above Satisfactory' or higher conformity with the implementation of measures aimed at student assessment and evaluation.

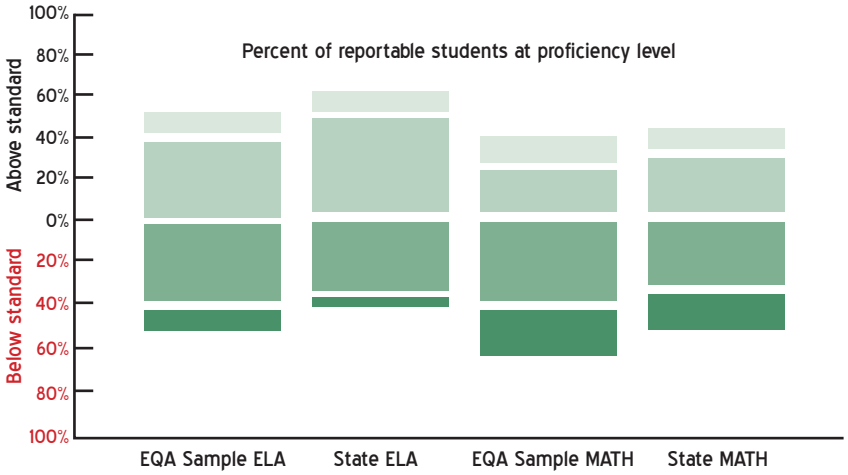
- During 2005, 71 percent of the districts reviewed received a 'Below Satisfactory' or lower performance assessment by the EQA for student assessment and evaluation.

- During 2005, 29 percent of the districts reviewed received a 'Satisfactory' performance assessment by the EQA for student assessment and evaluation.

The MCAS Test Data

In this section, we will compare the English language arts (ELA) and mathematics MCAS test averages for the study sample with statewide averages. Because the EQA is required to select "low" performing districts for 60 percent of its detailed examinations, and the EQA research sample is drawn from the EQA selection process, the EQA Sample falls below the statewide average at every level except for 'Needs Improvement' in mathematics. Nevertheless, these same low performing school districts, are the primary recipients of the largest portions of state Chapter 70 aid, as well as the major focus of the state's education reform efforts.

Figure 1. MCAS Test Data: EQA Sample/State 2005



	EQA Sample ELA	State ELA	EQA Sample MATH	State MATH
Advanced	9	14	13	20
Proficient	40	47	22	28
Needs Improv.	39	31	35	33
Warning/Failing	13	8	29	20

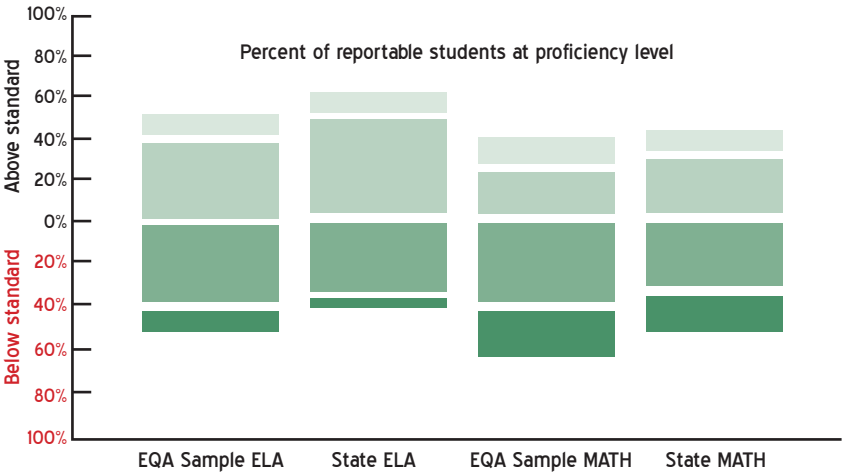
- On the 2005 MCAS test, 49 percent of the students in the EQA Sample scored in the 'Advanced' and 'Proficient' categories in ELA, 12 percentage points lower than that of students statewide.

- On the 2005 MCAS test, 52 percent of the students in the EQA Sample scored in the 'Needs Improvement' and 'Warning/Failing' categories in ELA, 13 percentage points higher than that of students statewide.

- On the 2005 MCAS test, 35 percent of the students in the EQA Sample scored in the 'Advanced' and 'Proficient' categories in mathematics, 13 percentage points lower than that of students statewide.

- On the 2005 MCAS test, 64 percent of the students in the EQA Sample scored in the 'Needs Improvement' and 'Warning/Failing' categories in mathematics, 11 percentage points higher than that of students statewide.

Figure 2. MCAS Test Data EQA Sample/State 2002-05



	EQA Sample ELA	State ELA	EQA Sample MATH	State MATH
Advanced	8	14	13	19
Proficient	41	48	22	27
Needs Improv.	38	30	36	34
Warning/Failing	14	8	29	20

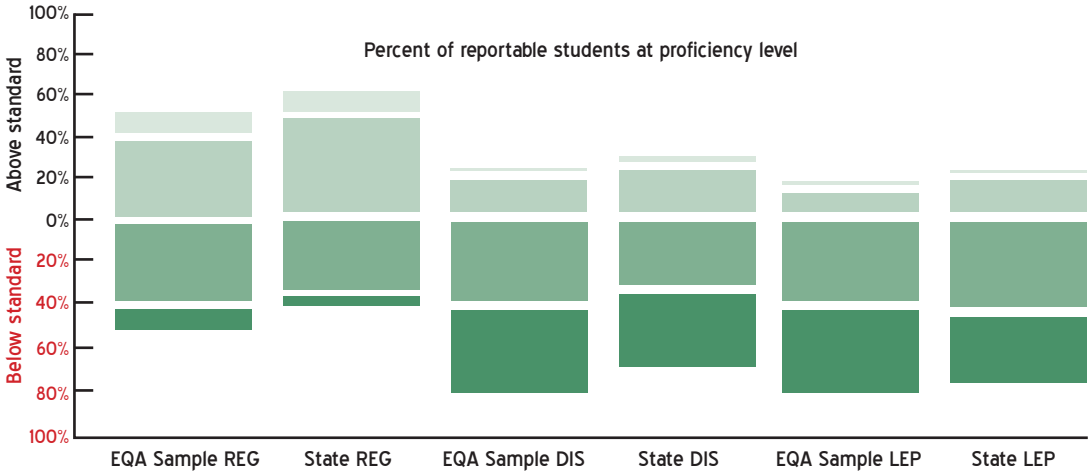
- On the 2002-05 MCAS tests, an overall average of 49 percent of the students in the EQA Sample scored in the 'Advanced' and 'Proficient' categories in ELA, 13 percentage points lower than that of students statewide.

- On the 2002-05 MCAS tests, an overall average of 52 percent of the students in the EQA Sample scored in the 'Needs Improvement' and 'Warning/Failing' categories in ELA, 14 percentage points higher than that of students statewide.

- On the 2002-05 MCAS tests, an overall average of 35 percent of the students in the EQA Sample scored in the 'Advanced' and 'Proficient' categories in mathematics, 11 percentage points lower than that of students statewide.

- On the 2002-05 MCAS tests, an overall average of 65 percent of the students in the EQA Sample scored in the 'Needs Improvement' and 'Warning/Failing' categories of mathematics, 11 percentage points higher than that of students statewide.

Figure 3. MCAS Test Data 2005 EQA Sample/State — Disabled Students 2005



	EQA Sample REG	State REG	EQA Sample DIS	State DIS	EQA Sample LEP	State LEP
Advanced	14	19	2	3	2	2
Proficient	37	44	12	20	9	15
Needs Improv.	36	29	41	43	38	40
Warning/Failing	13	8	45	34	52	42

- On the 2005 MCAS test, 51 percent of the EQA Sample Regular education students scored in the 'Advanced' and 'Proficient' categories, 12 percentage points lower than that of the Regular education students statewide.

- On the 2005 MCAS test, 49 percent of the EQA Sample Regular education students scored in the 'Needs Improvement' and 'Warning/Failing' categories, 12 percentage points higher than that of the Regular education students statewide.

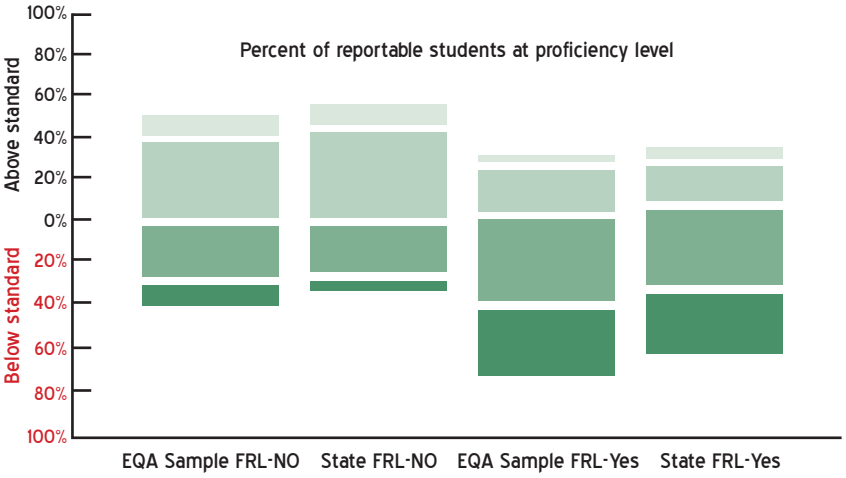
- On the 2005 MCAS test, 14 percent of the EQA Sample students with disabilities scored in the 'Advanced' and 'Proficient' categories, 9 percentage points lower than that of the students with disabilities statewide.

- On the 2005 MCAS test, 86 percent of the EQA Sample students with disabilities scored in the 'Needs Improvement' and 'Warning/Failing' categories, 9 percentage points higher than that of the students with disabilities statewide.

- On the 2005 MCAS test, 11 percent of the EQA Sample Limited English Proficiency (LEP) students scored in the 'Advanced' and 'Proficient' categories, 6 percentage points lower than that of the LEP students statewide.

- On the 2005 MCAS test, 90 percent of the EQA Sample LEP students scored in the 'Needs Improvement' and 'Warning/Failing' categories, 9 percentage points higher than that of the LEP students statewide.

Figure 4. MCAS Data 2005: EQA Sample/State — Free and Reduced Lunch No/ Yes Students 2005



	EQA Sample FRL-NO	State FRL-NO	EQA Sample FRL-Yes	State FRL-Yes
Advanced	18	20	4	5
Proficient	39	44	22	25
Needs Improv.	31	28	43	43
Warning/Failing	11	8	31	28

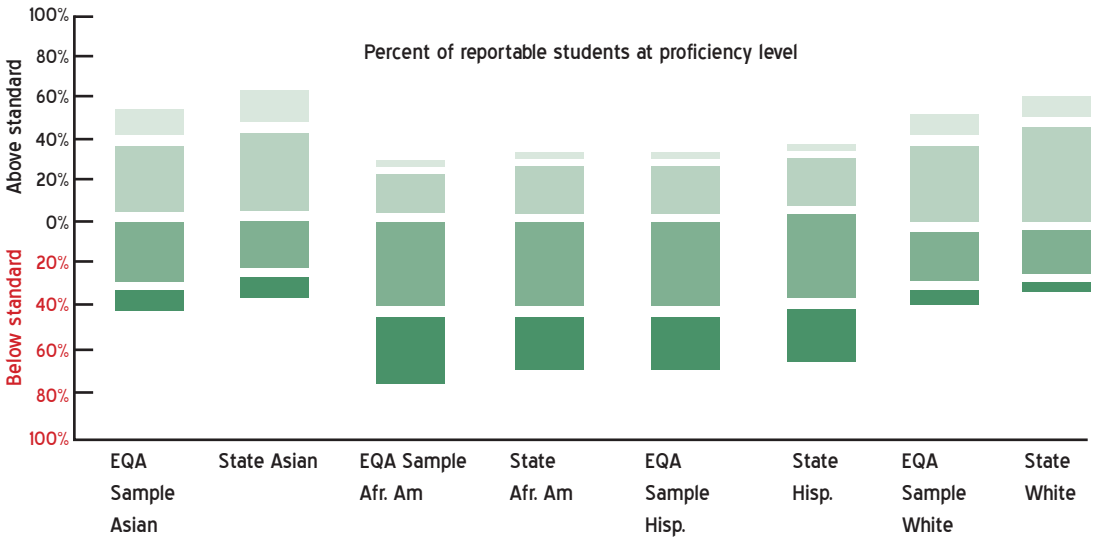
- On the 2005 MCAS test, 57 percent of the EQA Sample students who did not receive a Free or Reduced Lunch (FRL/No) scored in the 'Advanced' and 'Proficient' categories, 7 percentage points lower than that of the FRL/No students statewide.

- On the 2005 MCAS test, 42 percent of the EQA Sample FRL/No students scored in the 'Needs Improvement' and 'Warning/Failing' categories, 6 percentage points higher than that of the FRL/No students statewide.

- On the 2005 MCAS test, 26 percent of the EQA Sample FRL/Yes students scored in the 'Advanced' and 'Proficient' categories, 4 percentage points lower than that of the FRL/Yes students statewide.

- On the 2005 MCAS test, 74 percent of the EQA Sample FRL/Yes students scored in the 'Needs Improvement' and 'Warning/Failing' categories, 3 percentage points higher than that of the FRL/Yes students statewide.

Figure 5. MCAS Test Data: EQA Sample/State – Minority Subgroup Students 2005



	EQA Sample Asian	State Asian	EQA Sample Afr. Am	State Afr. Am	EQA Sample Hisp.	State Hisp.	EQA Sample White	State White
Advanced	20	25	4	4	3	3	16	18
Proficient	33	28	22	25	19	21	38	44
Needs Improv.	32	27	43	42	42	42	34	29
Warning/Failing	14	10	32	29	36	33	13	9

- On the 2005 MCAS test, 53 percent of the EQA Sample Asian-American students scored in the 'Advanced' and 'Proficient' categories, 10 percentage points lower than that of Asian-American students statewide.

- On the 2005 MCAS test, 46 percent of the EQA Sample Asian-American students scored in the 'Needs Improvement' and 'Warning/Failing' categories, 9 percentage points higher than that of Asian-American students statewide.

- On the 2005 MCAS test, 26 percent of the EQA Sample African-American students scored in the 'Advanced' and 'Proficient' categories, 3 percentage points lower than that of African-American students statewide.

- On the 2005 MCAS test, 75 percent of the EQA Sample African-American students scored in the 'Needs Improvement' and 'Warning/Failing' categories, 4 percentage points higher than that of African-American students statewide.

- On the 2005 MCAS test, 22 percent of the EQA Sample Hispanic-American students scored in the 'Advanced' and 'Proficient' categories, 2 percentage points lower than that of Hispanic-American students statewide.

- On the 2005 MCAS test, 78 percent of the EQA Sample Hispanic-American students scored in

the 'Needs Improvement' and 'Warning/Failing' categories, 3 percentage points higher than that of Hispanic-American students statewide.

- On the 2005 MCAS test, 54 percent of the EQA Sample White students scored in the 'Advanced' and 'Proficient' categories, 8 percentage points lower than that of White students statewide.

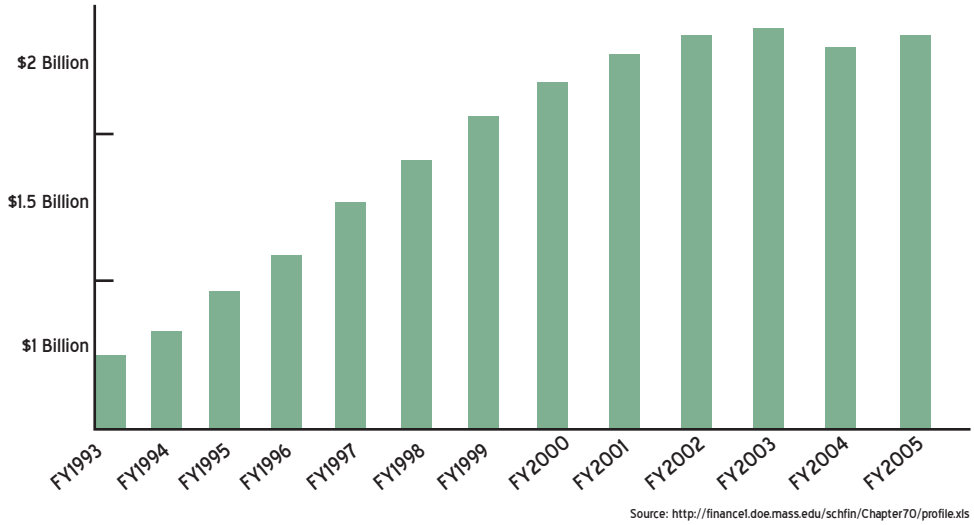
- On the 2005 MCAS test, 47 percent of the EQA Sample White students scored in the 'Needs Improvement' and 'Warning/Failing' categories, 9 percentage points higher than that of White students statewide.

Rates of Chapter 70 Funding

Districts with low-performing schools are also those that have been the major recipients of the state Chapter 70 aid. Because the EQA is required to over-represent these districts in its reviews, they are also over-represented in the EQA Sample. As a result, the Chapter 70 funding increase to the research sample is indicative of how great the increase in funding has been to "low" performing school district.

The following three figures illustrate the extent of these increases in state aid over the last decade. Given the sub-standard scores these districts have averaged on the MCAS test, and the sub-par performance assessment data in the EQA Sample's Assessment and Evaluation indicators, there is reason to doubt that districts receiving the highest level of financial support are spending their additional funds as wisely as possible.

Figure 6. EQA Sample: Chapter 70 Funding 1993-2005

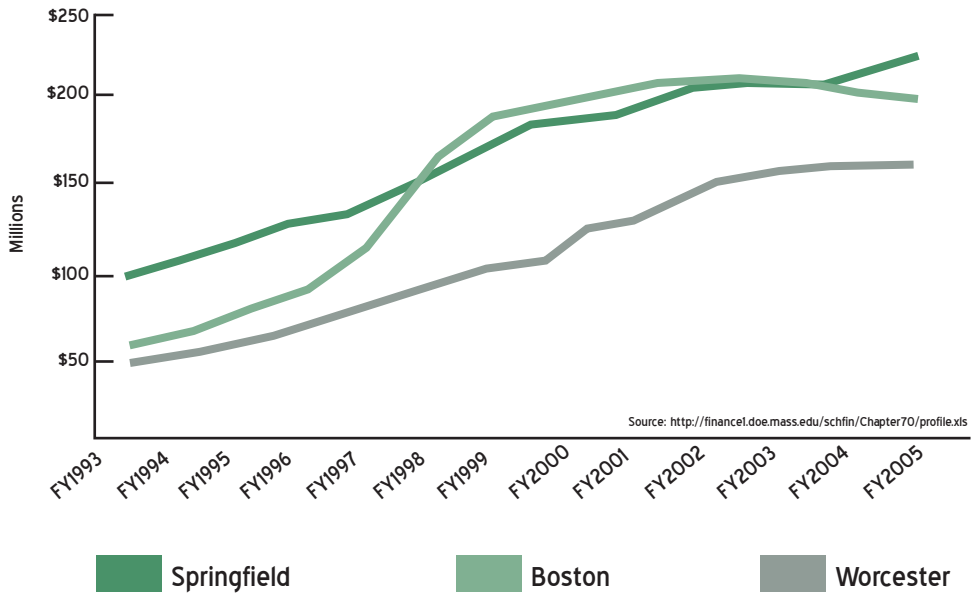


- From FY1993 to FY2005, the Chapter 70 aid for the EQA Sample increased 151 percent, from $770 million in FY1993 to $1.94 billion in FY2005. The total Chapter 70 aid distributed to these 76 selected school districts from FY1993 to FY2005 was $19 billion.

- From FY2000 to FY2005, the Chapter 70 aid for the EQA Sample increased 15 percent, from $1.7 billion in FY2000 to $1.95 billion in FY2005. The total Chapter 70 aid distributed to these 76 selected school districts from FY2000 to FY2005 was $11.15 billion.

* Note: Numbers rounded-off to the nearest million.

Figure 7. EQA Sample: Chapter 70 Funding, Top 3 Districts 1993-2005



- From FY1993 to FY2005, the Chapter 70 aid for the Springfield Public Schools increased 115 percent, from $100 million in FY1993 to $216 million in FY2005. The total Chapter 70 aid distributed to the Springfield Public Schools from FY1993 to FY2005 was $2.1 billion.

- From FY2000 to FY2005, the Chapter 70 aid for the Springfield Public Schools increased 19 percent, from $182 million in FY2000 to $216 million in FY2005. The total Chapter 70 aid distributed to the Springfield Public Schools from FY2000 to FY2005 was $1.21 billion.

- From FY1993 to FY2005, the Chapter 70 aid for the Boston Public Schools increased 238 percent, from $59 million in FY1993 to $200 million in FY2005. The total Chapter 70 aid distributed to the Boston Public Schools from FY1993 to FY2005 was $1.93 billion.

- From FY2000 to FY2005, the Chapter 70 aid for the Boston Public Schools increased 8 percent, from $186 million in FY2000 to $200 million in FY2005. The total Chapter 70 aid distributed to the Boston Public Schools from FY2000 to FY2005 was $1.2 billion.

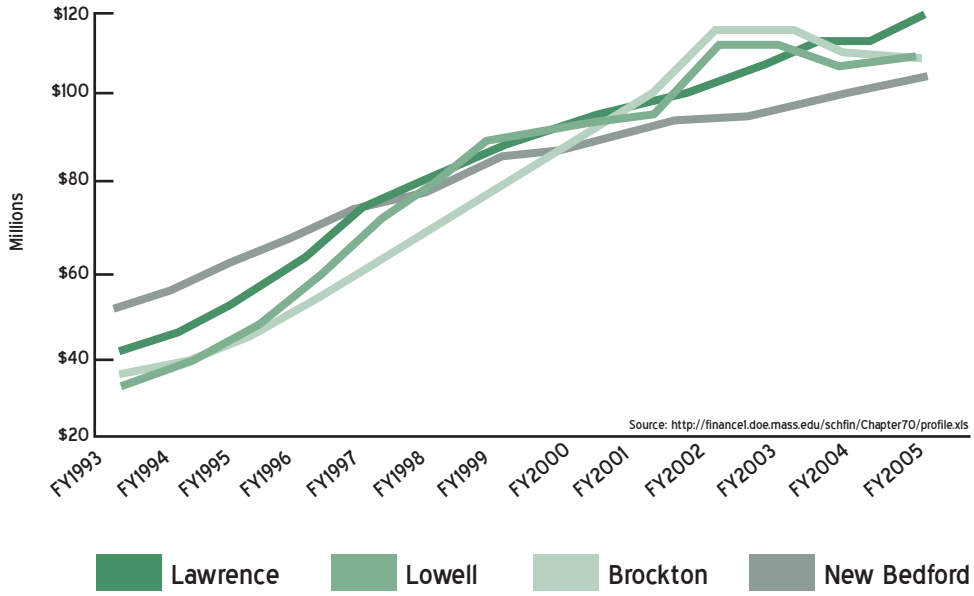
- From FY1993 to FY2005, the Chapter 70 aid for the Worcester Public Schools increased 206 percent, from $52 million in FY1993 to $159 million in FY2005. The total Chapter 70 aid distributed to the Worcester Public Schools from FY1993 to FY2005 was $1.44 billion.

- From fiscal years 2000 to 2005, the Chapter 70 aid for the Worcester Public Schools increased 22 percent, from $131 million in FY2000 to $159 million in FY2005. The total Chapter 70 aid distributed to the Worcester Public Schools from FY2000 to FY2005 was $882 million.

- The total combined increase for the EQA Sample in Chapter 70 aid from FY1993 to FY2005 was $1.17 billion. The total combined increase in Chapter 70 aid for Springfield, Boston, and Worcester for the same period was $363 million. This represents 31 percent of the total increase of the EQA Sample districts.

- The combined increase for the EQA Sample in Chapter 70 aid from FY2000 to FY2005 was $253 million. The combined increase in Chapter 70 aid for Springfield, Boston, and Worcester for the same period was $77 million. This represents 30 percent of the increase of the EQA Sample districts.

Figure 8. EQA Sample: Chapter 70 Funding, Other Districts 1993-2005



- From FY1993 to FY2005, the Chapter 70 aid for the Lawrence Public Schools increased 178 percent, from $41 million in FY1993 to $115 million in FY2005. The total Chapter 70 aid distributed to the Lawrence Public Schools from FY1993 to FY2005 was $1.08 billion.

- From FY2000 to FY2005, the Chapter 70 aid for the Lawrence Public Schools increased 19 percent, from $96 million in FY2000 to $115 million in FY2005. The total Chapter 70 aid distributed to the Lawrence Public Schools from FY2000 to FY2005 was $636 million.

- From FY1993 to FY2005, the Chapter 70 Aid for the Lowell Public Schools increased 204 percent, from $35 million in FY1993 to $108 million in FY2005. The total Chapter 70 aid distributed to the Lowell Public Schools from FY1993 to FY2005 was $1.04 billion.

- From FY2000 to FY2005, the Chapter 70 aid for the Lowell Public Schools increased 17 percent, from $92 million in FY2000 to $108 million in FY2005. The total Chapter 70 aid distributed to the Lowell Public Schools from FY2000 to FY2005 was $617 million.

- From FY1993 to FY2005, the Chapter 70 aid for the Brockton Public Schools increased 192 percent, from $37 million in FY1993 to $107 million in FY2005. The total Chapter 70 aid distributed to the Brockton Public Schools from FY1993 to FY2005 was $1.04 billion.

- From FY2000 to FY2005, the Chapter 70 aid for the Brockton Public Schools increased 16 percent, from $92 million in FY2000 to $107 million in FY2005. The total Chapter 70 aid distributed to the Brockton Public Schools from FY2000 to FY2005 was $629 million.

- From FY1993 to FY2005, the Chapter 70 aid for the New Bedford Public Schools increased 100 percent, from $51 million in FY1993 to $102 million in FY2005. The total Chapter 70 aid distributed to the New Bedford Public Schools from FY1993 to FY2005 was $1.03 billion.

- From FY2000 to FY2005, the Chapter 70 aid for the New Bedford Public Schools increased 18 percent, from $86 million in FY2000 to $104 million in FY2005. The total Chapter 70 aid distributed to the New Bedford Public Schools from FY2000 to FY2005 was $568 million.

- The total combined increase for the EQA Sample in Chapter 70 aid from FY1993 to FY2005 was $1.17 billion. The total combined increase in Chapter 70 aid for Lawrence, Lowell, Brockton, and New Bedford for the same period was $267 million. This represents 23 percent of the total increase of the EQA Sample districts.

- The combined increase for the EQA Sample in Chapter 70 aid from FY2000 to FY2005 was $253 million. The combined increase in Chapter 70 aid for Lawrence, Lowell, Brockton, and New Bedford for the same period was $65 million. This represents 26 percent of the increase of the EQA Sample districts.

Part Three: Conclusions

Reviewing the results of data analyses can be challenging to a district's perception of what is happening in its schools, and the extent to which adults' efforts and behavior actually result in children's academic success. The 76 local school districts examined in this report have significant work ahead to capitalize on the potential of the EQA's performance data. While this study cannot establish a direct causal link, there is certainly a correlation between poor MCAS test performance and failure to take advantage of performance data.

According to a Missouri educator familiar with educational accountability in several states, "a review of disaggregated student trend data can be like opening a trunk that's been packed away and neatly stored for years...You know the trunk is there, but until you open it and unpack it item by item, you really don't know what's inside."[17] It is only when districts have the courage and desire to look intensely at student achievement by subgroup that they can make decisions based on students' specific academic needs, not just educators' intuitions or perceptions.

According to data experts, in order to encourage school districts' use of student assessment data, states need to provide information in three areas.

- Test Scores: How do students perform on standardized tests from year-to-year? This is the baseline data that all districts should use.
- Standards: How do students perform on item analysis? That is, how do students, classes, subgroups, schools, and grades perform on particular questions on the tests? Often, this type of analysis reveals as much about the strengths and weaknesses of district instruction as about student performance.
- Questions: Are the test questions released to educators? Massachusetts is one of the few states that actually releases test questions. Analyzing the test questions and students' incorrect or correct answers to questions is vital to improving student achievement.

Massachusetts has provided information in all three areas. It also has one of the most generous education funding formulas in the nation, allocating more than $40 billion to support education reform since 1993, most of that to districts with under-performing schools. Therefore, lack of financial support cannot be considered the only obstacle to improving student achievement. The state DOE has also been effective in collecting and disseminating data, and the data it requires districts to collect provides them a wealth of information. Moreover, the MCAS assessments and state accountability measures are recognized as among the best in the country.

Local school districts are beginning to realize the importance of data. However, many of them do not know how to fully use the data they have. According to state officials, perhaps 70 percent of the districts in Massachusetts own copies of TestWiz, a basic tool for analyzing student assessment data; however, most state accountability examiners, data-savvy superintendents, and education data experts agree that TestWiz is only marginally helpful to teachers. Consequently, only a handful of districts in Massachusetts can truly be said to be data driven in their use of student assessment data to inform and drive education reform.

The inability of local school districts to develop student assessment practices that can drive reform is especially clear in Boston, Worcester, Springfield, Lowell, Fall River, and New Bedford. These are among the most heavily funded school districts in terms of state Chapter 70 aid between FY1993 and FY2005, but among the lowest academically performing districts in terms of performance on the MCAS test. The performance assessment data, the MCAS test data, and Chapter 70 data for the EQA research sample districts highlight a significant gap between state education reform policies and local educational practices with respect to using student assessment data.

A technical assistance partnership between the state DOE and districts regarding student data is long overdue. Districts need greater practical training in the analysis, usage, and storage of data. However, the state DOE's capacity to deliver technical assistance to districts remains weak, particularly with respect to using student assessment data to provide support and remediation in under-performing schools and districts. This is suggested not only by interviews found in the EQA's reports but also discussions with several district-level data specialists from around the state. Therefore, the state needs new policies that focus on using data to improve the quality of teaching and learning in the classroom.

Policy Recommendations

- As part of school improvement plans, all school districts and schools must indicate the process they will use to analyze data and to use that analysis to inform decision-making and instruction.

- Part of state Chapter 70 funding for each school and district should be earmarked for hiring a district-wide data specialist and the development of data-driven models of school reform. These models should be tied to professional development and on-going review and analysis of the curriculum, and should be adopted by each school committee.

Appendix A. Listing of EQA Sample

District	Year	Assessment	Evaluation	Avg.
Abington	2005	2	2	2
Adams Cheshire	2005	1	1	1
Ashburnham Westminster	2005	2	2	2
Assabet Valley	2005	1	2	1.5
Athol-Royalston	2004	2	1	1.5
Barnstable	2005	1	2	1.5
Bellingham	2005	2	2	2
Belmont	2004	2	2	2
Berkley	2005	1	0	0.5
Berkshire Hills	2005	1	1	1
Beverly	2005	1	1	1
Billerica	2003	3	1	2
Boston	2005	1	2	1.5
Braintree	2003	3	3	3
Brockton	2005	2	2	2
Burlington	2004	2	2	2
Cambridge	2004	2	2	2
Chelsea	2003	2	3	2.5
Chicopee	2004	2	2	2
Dighton-Rehobeth	2005	1	2	1.5
Douglas	2005	1	1	1
Easthampton	2005	1	1	1
Fall River	2004	2	1	1.5
Fitchburg	2003	1	1	1
Freetown-Lakeville	2005	1	0	0.5
Gardner	2005	1	2	1.5
Greater Fall River	2004	1	1	1
Greater Lawrence	2003	2	2	2
Greater Lowell	2005	1	2	1.5
Greater New Bedford	2004	2	1	1.5
Greenfield	2005	1	1	1
Hampshire	2005	0	1	0.5
Harvard	2004	3	2	2.5
Haverhill	2004	2	2	2
Hull	2005	2	2	2
Lawrence	2005	2	2	2
Leominster	2005	1	1	1

Appendix A. Listing of EQA Sample

District	Year	Assessment	Evaluation	Avg.
Longmeadow	2004	1	2	1.5
Lowell	2005	0	2	1
Lynn	2004	2	1	1.5
Malden	2004	2	2	2
Medfield	2004	3	3	3
Mohawk Trail	2005	1	2	1.5
Montachusett	2005	1	1	1
Narragansett	2005	1	2	1.5
Nashoba Valley Tech	2005	1	2	1.5
Nauset	2004	2	3	2.5
Needham	2003	3	3	3
New Bedford	2005	1	2	1.5
North Adams	2003	—	0	0
North Attleborough	2005	1	2	1.5
Northborough, Southborough	2004	2	2	2
Old Rochester	2005	2	2	2
Pioneer Valley	2005	2	2	2
Pittsfield	2003	—	2	2
Ralph C. Mahar	2004	1	2	1.5
Randolph	2004	2	1	1.5
Revere	2004	2	2	2
Salem	2004	2	2	2
Sharon	2004	2	2	2
Somerville	2004	2	2	2
South Middlesex	2003	1	0	0.5
Southbridge	2004	0	1	0.5
Southeastern RVT	2004	1	2	1.5
Springfield	2004	2	1	1.5
Tantasqua	2005	1	2	1.5
Taunton	2004	2	2	2
Ware	2004	1	1	1
Wareham	2005	2	2	2
Webster	2003	0	1	0.5
West Boylston	2004	2	2	2
West Springfield	2004	2	2	2
Westford	2004	1	2	1.5
Whittier	2003	2	1	1.5
Winchendon	2004	0	0	0
Worcester	2005	1	1	1

Appendix B. EQA Sampling Rationale

	EQA Report		EQA Sample		Rationale for Exclusion
1	Abington	2005	Abington	1	
2	Adams Cheshire	2005	Adams Cheshire	2	
3	Ashburnham-Westminster	2005	Ashburnham-Westminster	3	
4	Assabet Valley	2005	Assabet Valley	4	
5	Assabet Valley	2003			No Domain Tables
6	Athol-Royalston	2004	Athol-Royalston	5	
7	Attleboro	2002			No Domain Tables
8	Barnstable	2005	Barnstable	6	
9	Bellingham	2005	Bellingham	7	
10	Belmont	2004	Belmont	8	
11	Berkley	2005	Berkley	9	
12	Berkshire Hills	2005	Berkshire Hills	10	
13	Beverly	2005	Beverly	11	
14	Billerica	2003	Billerica	12	
15	Blackstone Valley	2004			Not Available
16	Boston	2005	Boston	13	
17	Braintree	2003	Braintree	14	
18	Brockton	2005	Brockton	15	
19	Burlington	2004	Burlington	16	
20	Cambridge	2004	Cambridge	17	
21	Chelsea	2003	Chelsea	18	
22	Chicopee	2004	Chicopee	19	
23	Chicopee	2003			No Domain Tables
24	Clinton	2004			Not Available
25	Dighton-Rehoboth	2005	Dighton-Rehobeth	20	
26	Douglas	2005	Douglas	21	
27	Easthampton	2005	Easthampton	22	
28	Fall River	2004	Fall River	23	
29	Fall River	2003			Change in Format
30	Fitchburg	2003	Fitchburg	24	
31	Freetown-Lakeville	2005	Freetown-Lakeville	25	
32	Gardner	2005	Gardner	26	
33	Greater Fall River	2004	Greater Fall River	27	
34	Greater Lawrence	2003	Greater Lawrence	28	
35	Greater Lowell	2005	Greater Lowell	29	
36	Greater New Bedford	2004	Greater New Bedford	30	
37	Greenfield	2005	Greenfield	31	
38	Hampshire	2005	Hampshire	32	
39	Harvard	2004	Harvard	33	
40	Haverhill	2004	Haverhill	34	
41	Holyoke	2004			Early EQA Format
42	Holyoke	2003			Early EQA Format
43	Hull	2005	Hull	35	
44	Lawrence	2005	Lawrence	36	
45	Leominster	2005	Leominster	37	
46	Longmeadow	2004	Longmeadow	38	

Appendix B. EQA Sampling Rationale

	EQA Report		EQA Sample		Rationale for Exclusion
47	Lowell	2005	Lowell	39	
48	Lowell	2002			No Domain Tables
49	Lynn	2004	Lynn	40	
50	Malden	2004	Malden	41	
51	Medfield	2004	Medfield	42	
52	Methuen	2002			Early EQA Format
53	Mohawk Trail	2005	Mohawk Trail	43	
54	Montachusett	2005	Montachusett	44	
55	Narragansett	2005	Narragansett	45	
56	Nashoba Valley Tech	2005	Nashoba Valley Tech	46	
57	Nauset	2004	Nauset	47	
58	Needham	2003	Needham	48	
59	New Bedford	2005	New Bedford	49	
60	North Adams	2003	North Adams	50	
61	North Attleboro	2005	North Attleboro	51	
62	Northampton	2003			Early EQA Format
63	Northborough, Southborough	2004	Northborough, Southborough	52	
64	Northeast Metropolitan	2004			Not Available
65	Old Rochester	2005	Old Rochester	53	
66	Pioneer Valley	2005	Pioneer Valley	54	
67	Pittsfield	2003	Pittsfield	55	
68	Ralph C. Mahar	2004	Ralph C. Mahar	56	
69	Randolph	2004	Randolph	57	
70	Revere	2004	Revere	58	
71	Salem	2004	Salem	59	
72	Sharon	2004	Sharon	60	
73	Somerville	2004	Somerville	61	
74	South Middlesex	2003	South Middlesex	62	
75	Southbridge	2003			Redundant
76	Southbridge	2004	Southbridge	63	
77	Southeastern RVT	2004	Southeastern RVT	64	
78	Springfield	2004	Springfield	65	
79	Tantasqua	2005	Tantasqua	66	
80	Taunton	2004	Taunton	67	
81	Ware	2004	Ware	68	
82	Wareham	2005	Wareham	69	
83	Webster	2003	Webster	70	
84	West Boylston	2004	West Boylston	71	
85	West Springfield	2004	West Springfield	72	
86	Westfield	2003			Early EQA Format
87	Westford	2004	Westford	73	
88	Whittier RVT	2003	Whittier RVT	74	
89	Winchendon	2004	Winchendon	75	
90	Winchendon	2004			Tier III Report
91	Worcester	2005	Worcester	76	

Appendix C. Indicator Methodology

2003: Domain A. Assessment and Evaluation

Standards ▼ Indicators ►	1	2	3	4	5	6	7	8	9	10	Total
Domain A — Assessment and Evaluation											
S1 — Student Assessment											
Excellent	0	0	1	1	0	1	1	1	N/A	N/A	5
Satisfactory	1	1	0	0	1	0	0	0	N/A	N/A	3
Poor	0	0	0	0	0	0	0	0	N/A	N/A	0
Unsatisfactory	0	0	0	0	0	0	0	0	N/A	N/A	0
S2 — Participation											
Excellent	0	0	0	1	0	0	1	N/A	N/A	N/A	2
Satisfactory	1	1	1	0	1	1	0	N/A	N/A	N/A	0
Poor	0	0	0	0	0	0	0	N/A	N/A	N/A	0
Unsatisfactory	0	0	0	0	0	0	0	N/A	N/A	N/A	0
S3 — Evaluation Processes											
Excellent	0	1	1	0	1	0	N/A	N/A	N/A	N/A	3
Satisfactory	1	0	0	1	0	1	N/A	N/A	N/A	N/A	3
Poor	0	0	0	0	0	0	N/A	N/A	N/A	N/A	0
Unsatisfactory	0	0	0	0	0	0	N/A	N/A	N/A	N/A	0

Standard 1. STUDENT ASSESSMENT: District and building administrators carefully administer statewide assessments and teachers regularly assess the performance of their students relative to state and local student performance standards, and analyze aggregate and individual assessment results to improve curricula, instructional practices, and supplementary and remedial programs.

2003 Indicators:

1. The district has clear assessment policies and procedures that direct the regular evaluation of classroom, school, district, and state assessment results.
2. District and building administrators carefully and accurately implement the "Principles of Test Administration" in their jurisdictions and provide complete and accurate information on student status and participation in accordance with the "Principles" in the administration of the MCAS test and system-wide tests.
3. The district regularly employs criterion-referenced tests, norm-referenced tests, or other standardized tests in addition to the MCAS test to assess the progress of all student populations.
4. Regular analysis of assessment results informs improvements to:
   a. curricula,
   b. instructional practices,
   c. supplementary and remedial programs and services,
   d. professional development, and
   e. purchasing and provisioning for improved student achievement.
5. The district and each of its schools disseminate assessment analyses to appropriate staff at regular intervals.
6. District administrators, building administrators, and teachers demonstrate that they have the skills to use aggregate and individual test analyses to improve instructional programs and services for all student populations.
7. The district educates all of its students to meet or exceed the Competency Determination (CD) standard by their senior year.
8. Classroom assessment standards, practices, and expectations for teachers and students are consistently linked with learning standards articulated in the state curriculum frameworks.

Appendix C. Indicator Methodology

2004: Domain A. Assessment and Evaluation

Standards ▼ Indicators ►	1	2	3	4	5	6	7	8	Total
Domain A — Assessment and Evaluation									
S1 — Student Assessment									
Excellent	0	0	0	0	0	0	0	0	0
Satisfactory	1	0	1	1	1	1	0	0	5
Poor	0	1	0	0	0	0	0	1	2
Unsatisfactory	0	0	0	0	0	0	1	0	1
S2 — Participation									
Excellent	0	0	0	0	0	0	0	N/A	0
Satisfactory	0	1	1	0	1	0	1	N/A	4
Poor	0	0	0	1	0	1	0	N/A	2
Unsatisfactory	1	0	0	0	0	0	0	N/A	1
S3 — Evaluation Processes									
Excellent	0	0	0	0	0	0	N/A	N/A	0
Satisfactory	1	1	1	0	0	0	N/A	N/A	3
Poor	0	0	0	0	0	1	N/A	N/A	1
Unsatisfactory	0	0	0	1	1	0	N/A	N/A	2

Standard 1. STUDENT ASSESSMENT: District and building administrators carefully administer statewide assessments and teachers regularly assess the performance of their students relative to state and local student performance standards, and analyze aggregate and individual assessment results to improve curricula, instructional practices, and supplementary and remedial programs.

2004 Indicators:

1. The district has clear assessment policies and procedures that direct the regular evaluation of classroom, school, district, and state assessment results.
2. District and building administrators carefully and accurately implement the "Principles of Test Administration" in their jurisdictions and provide complete and accurate information on student status and participation in accordance with the "Principles" in the administration of the MCAS test and system-wide tests.
3. The district regularly employs criterion-referenced tests, norm-referenced tests, or other standardized tests in addition to the MCAS test to assess the progress of all student populations.
4. Regular analysis of assessment results informs improvements to:
   a. curricula,
   b. instructional practices,
   c. supplementary and remedial programs and services,
   d. professional development, and
   e. purchasing and provisioning for improved student achievement.
5. The district and each of its schools disseminate assessment analyses to appropriate staff at regular intervals.

6. District administrators, building administrators, and teachers demonstrate that they have the skills to use aggregate and individual test analyses to improve instructional programs and services for all student populations.
7. The district educates all of its students to meet or exceed the Competency Determination (CD) standard by their senior year.
8. Classroom assessment standards, practices, and expectations for teachers and students are consistently linked with learning standards articulated in the state curriculum frameworks.

Appendix C. Indicator Methodology

2005: Domain A. Assessment and Evaluation

Standards ▼ Indicators ►	1	2	3	4	5	6	7	8	Total
Domain A — Assessment and Evaluation									
S1 — Student Assessment									
Excellent	0	0	0	0	0	0	0	N/A	0
Satisfactory	1	1	1	0	1	1	1	N/A	6
Poor	0	0	0	1	0	0	0	N/A	1
Unsatisfactory	0	0	0	0	0	0	0	N/A	0
S2 — Participation									
Excellent	0	0	0	0	0	0	0	N/A	0
Satisfactory	1	1	1	1	1	1	1	N/A	7
Poor	0	0	0	0	0	0	0	N/A	0
Unsatisfactory	0	0	0	0	0	0	0	N/A	0
S3 — Evaluation Processes: Personel									
Excellent	0	0	0	0	0	0	0	0	0
Satisfactory	0	0	0	0	0	0	0	1	1
Poor	1	0	0	0	0	1	0	0	2
Unsatisfactory	0	1	1	1	1	0	1	0	5
S4—Evaluation Processes: Programs, Services and Resource Aquisition									
Excellent	0	0	0	0	0	0	N/A	N/A	0
Satisfactory	0	0	0	0	0	0	N/A	N/A	0
Poor	1	1	1	1	1	1	N/A	N/A	6
Unsatisfactory	0	0	0	0	0	0	N/A	N/A	0

Standard 1. STUDENT ASSESSMENT: For the period of time under examination, district and building administrators carefully administered statewide assessments and teachers regularly assessed the performance of their students relative to state and local student performance standards, and analyzed aggregate and individual assessment results to improve curricula, instructional practices, and supplementary and remedial programs.

2005 Indicators:

1. The district utilized assessment policies and practices that resulted in the formal, regular evaluation of student assessment results.
2. In order to improve achievement for all students, the district used aggregated and disaggregated assessment scores to assess student progress for all populations. Student performance has improved across all subgroups.
3. District and building administrators carefully and accurately implemented the "Principles of Test Administration" in their jurisdictions and provided complete and accurate information on student status and participation in accordance with the "Principles" in the administration of the MCAS test and system-wide tests.
4. In addition to the MCAS, the district regularly employed the use of standardized tests, local benchmarks, or other assessments to measure the progress of all student populations at regular intervals and used these results to measure the effectiveness of achieving district objectives for student learning.
5. The district engaged in a formal, documented annual review of student assessment data to reallocate staff and prioritize resource distribution to improve achievement for all student populations.
6. The district and each of its schools disseminated assessment analyses to appropriate staff at regular intervals.
7. Assessment trend data indicated that classroom assessment standards, practices, and expectations for students were consistently linked with the learning standards articulated in the State Curriculum Frameworks.

Appendix C. Indicator Methodology

Domain A — Assessment and Evaluation

This study relies upon EQA assessment data outcomes from Domain A – Assessment and Evaluation. In the EQAs completed for 2003 and 2004 the Domain A – Assessment and Evaluation tables were comprised of three Standards:

S1-Student Assessment S2-Participation S3-Evaluaton Processes

Standards ▼	Indicators ►	1	2	3	4	5	6	7	8	Total
Domain A — Assessment and Evaluation										
S1 — Student Assessment										
Excellent		0	0	0	0	0	0	0	0	0
Satisfactory		1	0	1	1	1	1	0	0	5
Poor		0	1	0	0	0	0	0	1	2
Unsatisfactory		0	0	0	0	0	0	1	0	1
S2 — Participation										
Excellent		0	0	0	0	0	0	0	N/A	0
Satisfactory		0	1	1	0	1	0	1	N/A	4
Poor		0	0	0	1	0	1	0	N/A	2
Unsatisfactory		1	0	0	0	0	0	0	N/A	1
S3 — Evaluation Processes										
Excellent		0	0	0	0	0	0	N/A	N/A	0
Satisfactory		1	1	1	0	0	0	N/A	N/A	3
Poor		0	0	0	0	0	1	N/A	N/A	1
Unsatisfactory		0	0	0	1	1	0	N/A	N/A	2

In the EQAs completed for 2005 the Domain A – Assessment and Evaluation tables were comprised of four Standards:

S1-Student Assessment S2-Participation S3-Evaluaton Processes: Personnel
S4-Evaluaton Processes: Programs, Services, and Resource Acquisition

Standards ▼	Indicators ►	1	2	3	4	5	6	7	8	Total
Domain A — Assessment and Evaluation										
S1 — Student Assessment										
Excellent		0	0	0	0	0	0	0	N/A	0
Satisfactory		1	1	1	0	1	1	1	N/A	6
Poor		0	0	0	1	0	0	0	N/A	1
Unsatisfactory		0	0	0	0	0	0	0	N/A	0
S2 — Participation										
Excellent		0	0	0	0	0	0	0	N/A	0
Satisfactory		1	1	1	1	1	1	1	N/A	7
Poor		0	0	0	0	0	0	0	N/A	0
Unsatisfactory		0	0	0	0	0	0	0	N/A	0
S3 — Evaluation Processes: Personel										
Excellent		0	0	0	0	0	0	0	0	0
Satisfactory		0	0	0	0	0	0	0	1	1
Poor		1	0	0	0	0	1	0	0	2
Unsatisfactory		0	1	1	1	1	0	1	0	5
S4—Evaluation Processes: Programs, Services, and Resource Aquisition										
Excellent		0	0	0	0	0	0	N/A	N/A	0
Satisfactory		0	0	0	0	0	0	N/A	N/A	0
Poor		1	1	1	1	1	1	N/A	N/A	6
Unsatisfactory		0	0	0	0	0	0	N/A	N/A	0

Appendix C. Indicator Methodology

Student Assessment Standard

The student assessment standard is measured by a maximum of eight Indicators. Unfortunately, differences exist in the sequencing and description of indicators used in 2003-04 versus those used in 2005. Below are the descriptions provided for the indicators from the two time periods.

EQAs 2003-04 S1-Student Assessment Indicators

1. The district has clear assessment policies and procedures that direct the regular evaluation of classroom, school, district, and state assessment results.
2. District and building administrators carefully and accurately implement the "Principles of Test Administration" in their jurisdictions and provide complete and accurate information on student status and participation in accordance with the "Principles" in the administration of the MCAS test and system-wide tests.
3. The district regularly employs criterion-referenced tests, norm-referenced tests, or other standardized tests in addition to the MCAS test to assess the progress of all student populations.
4. Regular analysis of assessment results informs improvements to:
   a. curricula,
   b. instructional practices,
   c. supplementary and remedial programs and services,
   d. professional development, and
   e. purchasing and provisioning for improved student achievement.
5. The district and each of its schools disseminate assessment analyses to appropriate staff at regular intervals.
6. District administrators, building administrators, and teachers demonstrate that they have the skills to use aggregate and individual test analyses to improve instructional programs and services for all student populations.
7. The district educates all of its students to meet or exceed the Competency Determination (CD) standard by their senior year.
8. Classroom assessment standards, practices, and expectations for teachers and students are consistently linked with learning standards articulated in the state curriculum frameworks.

EQAs 2005 S1-Student Assessment Indicators

1. The district utilized assessment policies and practices that resulted in the formal, regular evaluation of student assessment results.
2. In order to improve achievement for all students, the district used aggregated and disaggregated assessment scores to assess student progress for all populations. Student performance has improved across all subgroups.
3. District and building administrators carefully and accurately implemented the "Principles of Test Administration" in their jurisdictions and provided complete and accurate information on student status and participation in accordance with the "Principles" in the administration of the MCAS test and system-wide tests.
4. In addition to the MCAS, the district regularly employed the use of standardized tests, local benchmarks, or other assessments to measure the progress of all student populations at regular intervals and used these results to measure the effectiveness of achieving district objectives for student learning.
5. The district engaged in a formal, documented annual review of student assessment data to reallocate staff and prioritize resource distribution to improve achievement for all student populations.

Appendix C. Indicator Methodology

Accuracy of the Data

In the interest of representing EQA assessment data as accurately as possible and to insure that all of the districts in this report be represented fairly, it was necessary to cross-reference the indicator sequencing and descriptions between the two time periods described above. Because the focus of this study is on "assessment" only those indicators directly related to assessment and evaluation were examined.

The table below illustrates how differences between the S1-Student Assessment (2003-04) and S1-Student Assessment (2005) Indicators were resolved. Indicator 3 from 2003-04 was re-stated by Indicator 2 in 2005. For purposes of doing a statewide comparison of district EQAs spanning the years from 2003 to 2005, both of these were re-coded as the indicator Assessment. Indicator 4 in 2003-04 was restated in 2005 again as Indicator 4. These were re-coded as the indicator Evaluation.

In the summary statistics the mean average of the outcomes for District Assessment and District Evaluation is included, along with the original indicators, as an option for parsimony when comparing it with other outcomes. The following standard was followed for including exceptions within the EQA reported data:

- If one indicator was labeled as N/A and the other had been scored, the score was entered.
- If both indicators had an identical score, that score was used, but only as a single entry.
- If the indicators had different scores, the average of the two was used as a single entry.

District EQA
Domain A. Assessment and Evaluation
Standard: S1 Student Assessment

Indicator: Assessment

2003-04, Indicator 3	2005, Indicator 2
The district regularly employs criterion referenced tests, norm-referenced tests, or other standardized tests in addition to the MCAS test to assess the progress of all student populations.	In order to improve achievement for all students, the district used aggregated and disaggregated assessment scores to assess student progress for all populations. Student performance has improved across all subgroups.

Indicator: Evaluation

2003-04, Indicator 4	2005, Indicator 4
Regular analysis of assessment results informs improvements to: a. curricula, b. instructional practices, c. supplementary and remedial programs and services, d. professional development, and e. purchasing and provisioning for improved student achievement.	In addition to the MCAS, the district regularly employed the use of standardized tests, local benchmarks, or other assessments to measure the progress of all student populations at regular intervals and used these results to measure the effectiveness of achieving district objectives for student learning.

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