## **Educational Management Accountability Board**

Executive Office for Administration and Finance, Andrew Natsios, Secretary Department of Revenue, Frederick Laskey, Commissioner Division of Local Services, Joseph J. Chessey, Jr., Deputy Commissioner Education Audit Bureau, Dieter Wahl, Director

# First Findings

THE SUMMATIVE REPORT OF THE EDUCATIONAL MANAGEMENT ACCOUNTABILITY BOARD ON THE AUDITS OF MASSACHUSETTS SCHOOL DISTRICTS AND THE IMPACT OF THE EDUCATION REFORM ACT

мarch 2000

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The Division of Local Services would like to acknowledge the professional cooperation extended to the audit team by The Department of Education, and the audited districts.

## **Summary of Findings**

This report of the Education Management Accountability Board's school district audit findings is based on the first 18 audits conducted. The findings may not be true for all 344 school districts in the state. These audits have, however, allowed the Board and the Division of Local Services to collect a great deal of data for analysis that would not otherwise be available. In addition to 22 findings determined by the Board, the Board has also identified several barriers to improving student performance and several qualities of successful school districts through the audit process. For the audited districts, we have found the following:

#### **Findings**

- ✓ School districts have attained the target of 100% of their foundation budgets on schedule.
- ✓ The state share of school operational budgets has increased since the implementation of Education Reform.
- ✓ School districts are meeting net school spending requirements.
- ✓ The minimum is not the maximum: municipalities have been investing more than the minimum required by the formula.
- ✓ School district spending has increased in real terms since the implementation of Education Reform.
- ✓ School districts have hired new teachers.
- ✓ Most school districts have reduced student/teacher ratios.
- ✓ The average teacher salary increased in all districts.
- ✓ Salary schedules have outpaced inflation.
- ✓ The allocation for art, music and physical education programs increased in districts for which the information was available. Programs in art, music and physical education were restored in districts which had eliminated them prior to the Act.
- ✓ Schools have invested in textbooks and other education supplies.
- ✓ School districts have invested significant sums in professional development.
- ✓ The foundation budget targets for specific expenditures have not been achieved.
- ✓ The investment in technology has increased significantly however, with little attention paid to the districts' technology plans.
- ✓ Costs related to special education services absorbed a disproportionate amount of the new financial resources.
- ✓ Most districts have not utilized governance changes establishing performance-based contracts for principals.
- ✓ In most districts, in terms of the principals' contracts, principals were essentially treated as if the Education Reform Act had not been enacted.
- ✓ Nearly all schools have created school improvement plans but many plans do not address student performance or test results.

- ✓ Most school districts have met the minimum Time & Learning requirement however, few districts have extended the school year.
- ✓ Thus far, there is little correlation between the increased investment in the classroom as measured by per pupil net school spending, and academic achievement as measured by test scores.
- ✓ Some districts' test results surpassed demographic predictors.
- ✓ SAT participation rates have declined significantly in several of the audited districts.

Further, the Board has determined several barriers to improving student performance and several qualities of effective schools through analysis of these findings.

#### Barriers to Improving Student Performance

Six barriers to improving student performance were identified through the audit process. Four of these barriers were suggested by the superintendents in the audited districts. The last two barriers listed were identified by the Board through analysis of the audits conducted.

Special education costs;

Enrollment increases;

Imperfect staff dismissal process;

Lack of stable and coherent leadership;

Failure to implement governance reforms; and

Lack of coherent data collection on Education Reform spending, and practices by the state.

#### Qualities of Effective Schools

Successful organizations tend to exhibit some basic characteristics.

Strong, positive leadership with a sense of clear direction that is communicated well though out the organization;

Clear communication of goals through mission statements;

Strategic plans that contain specific goals and objectives to be met;

Method of measuring progress and holding managers accountable; and

Sustained efforts to improve the curriculum and align it with the state frameworks.

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## **Preface**

During the late 1980s and early 1990s education reform was the focus of debate nationally and at a state level here in Massachusetts. Two facts were clear. First, many students were not gaining the necessary knowledge and skills to be productive, informed citizens. Second, a new funding system that relied more heavily than ever before on state aid was necessary to provide an adequate education for all students. The legislature and executive branch spent 1991 and 1992 developing legislation to reform education in Massachusetts. A year later this monumental task was achieved when the General Court passed the Education Reform Act (ERA) of 1993 to introduce sweeping changes in the way public education would be financed and administered.

The new law specified what might constitute a reasonable minimum level of spending per student and created a formula to define a "foundation budget" for each school district. State aid would be provided to certain communities to help reach their foundation budget over a seven-year period, from fiscal year 1993 to fiscal year 2000.

The law gave school districts more authority to set policy and make decisions about educational programs. School committees were given the authority to set school budgets according to state mandated spending requirements, to hire and fire school superintendents, and to approve school improvement plans. Superintendents were given authority to hire and fire school principals while school principals were given management rights over their schools including the hiring of teachers, preparing school improvement plans and buying textbooks.

Mission statements for the district and individual schools would be in place providing a sense of purpose and direction. School councils would be established for each school to prepare school improvement plans that address school needs and student achievement. Technology and professional development plans were required. The state Department of Education (DOE) was tasked to develop state frameworks in the basic academic disciplines to ensure that each student would be learning the same material. Minimum "time in learning" standards were required to ensure that students would spend a minimum number of hours each year in the classroom. Statewide tests would then be used to measure progress in student achievement.

To ensure that proper incentives as well as checks and balances were in place at all levels, the Act provided for contracts between the school committee and the superintendent. The school committee would structure the superintendent's contract to include specific goals to be reached and would include salary increases based on performance. Principals would be under contract to the superintendent with performance standards and pay increases based on performance. Teacher evaluation systems would be used to assess teaching performance. Professional development and periodic re-certification of teachers were required to maintain and improve teacher skills.

As a matter of equity, the Act resolved to commit the Commonwealth to a multi-billion dollar investment in public education to provide the resources for all schools to succeed.

## The Education Reform Act – Funding and Accountability

To finance necessary funding increases for local education, state aid under the new education finance formula (hereinafter "Chapter 70") was to be increased until foundation budget targets were met in all school districts in fiscal year 2000. Budgets in many school districts decreased significantly during the recession of the early 1990's. Much of the additional state education aid appropriated in the early years of education reform was used to make up lost ground and return to a level of spending that had been achieved in the late 1980s by many school districts. The middle and later years of education reform funding have resulted in significant increases over both 1989 and 1993 levels.

State aid under Chapter 70 has more than doubled since FY1993. From FY1994 to FY2000, Massachusetts invested \$14.6 billion in the aggregate in K-12 education.

3,000,000,000 2,500,000,000 1,500,000,000 500,000,000 FY89 FY90 FY91 FY92 FY93 FY94 FY95 FY96 FY97 FY98 FY99 FY00

CHART A. STATE FUNDING FOR CHAPTER 70 SCHOOL FUNDING

The difference between ERA and other education reform initiatives was an emphasis on accountability, including student performance on a new series of tests. However, these new tests required the articulation of standards or content to be learned. The process of defining student standards took longer than was anticipated As a result, the process of raising student achievement was unfocused, if not delayed.

In February 1997, Governor William Weld executed Executive Order 393 establishing the Educational Management Accountability Board (EMAB). EMAB's mission was to review, investigate and report on the expenditure of funds by school districts, consistent with the goals of improving student achievement. The Order also directed the Board to verify the accuracy of reports submitted by school districts to DOE, and review progress under Education Reform.

To assist the Board in this effort, a team of auditors from DOR's Division of Local Services (DLS) was selected to conduct school district reviews with authority to examine municipal and school department accounts and transactions. Districts were chosen for review to provide a mosaic of urban, suburban, regional and rural school districts. The Malden school district was chosen as the first test site. Subsequent districts were chosen by the Board to provide a balance between urban and suburban districts. Regional and rural school districts were included in the following year as the audit effort expanded.

The audited districts were: --

School district	Report date	School district	Report date
Malden	November 1997	North Reading	September 1999
Brockton	January 1998	Milton	September 1999
Lowell	March 1998	Everett	September 1999
Lexington	April 1998	New Bedford	October 1999
Triton RSD	June 1998	Woburn	November 1999
Worcester	October 1998	East Longmeadow	December 1999
Braintree	March 1999	North Attleborough	December 1999
Salem	April 1999	Cambridge	January 2000
Gardner	August 1999	Auburn	January 2000
		Agawam <sup>1</sup>	February 2000

These districts represent 18 of the 344 districts in the state, which may be a small number of the total number of school districts but which constituted approximately 14% of the statewide net school spending in fiscal year 1998. The districts do not represent demographically all districts in the state. They are generally larger in student enrollment, in budget and include more urban districts and fewer rural districts.

In 1999 the Department of Education began collaborating with DLS to produce joint audit reports. Two audits have been completed in collaboration thus far. Prior to the official collaboration effort, DOE provided a great deal of report information to the audit team and continues to do so. The Board wishes to extend its thanks to Commissioner of Education David Driscoll and his staff for their assistance.

The audit reports may be accessed at the web site for the Department of Revenue's Division of Local Services. The web address: http://www.state.ma.us/dls.

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<sup>&</sup>lt;sup>1</sup> Due to time constraints, the data on the Agawam audit has not been included in this Report.

### I. The Context: The Education Reform Act

The Education Reform Act of 1993 ("the Act") consisted of several threads of change:

A higher level of educational achievement of students, and

Equity financing to increase investments in

- more teachers to reduce class size and competitive compensation for under-funded districts.
- classroom textbooks and instructional materials,
- professional development for educators, and
- more time in school for students, both during the school day and after-school.

### What Did We Expect to Happen?

Standing on the steps of a Malden elementary school on a warm afternoon on June 18, 1993, the question might have been asked -- "What should one expect to see in our schools in the next few years as a result of the Education Reform Act?" At first, the "building blocks" for improvement would be funded, such as:

*More staff.* There is little mystery to school spending: most of a district's costs are associated with personnel -- teachers and aides. Given the relatively bleak fiscal circumstances of the late 1980's and early 90's, one should have expected more teachers to be hired to reduce class size and restore programs, such as art, music and afterschool programs.

*More competitive salary for teachers*. In many underfunded districts, the salary scale for teachers was woefully out of line with the rest of the state. One should have expected a new salary structure could be needed to attract talented teachers.

**Restoration of programs**. In addition to the aforementioned art and music programs, extracurricular activities and after school programs ("expanded programs") would also have been funded.

**Reinvestment in school infrastructure**. The infrastructure of Massachusetts' school system is among the oldest in the country. The need for sustained maintenance of school buildings has been documented by several state and federal reports. The foundation budget's allocation for "extraordinary maintenance" was designed to assist districts address this oft-deferred capital maintenance.

*Instructional supplies*. New instructional materials such as text books, technology, maps and lab equipment would have been purchased to address the need for up-to-date equipment in a standards-based reform initiative.

**Professional development**. A coherent professional development targeted towards improving student performance and based on classroom observations would be funded.

*Time in school*. State and national reports confirm that our schools are woefully behind other nations in the amount of time students spend in classrooms. For some school districts, it was hoped that the infusion of funds -- without limitations -- would allow the schools to be reconfigured in terms of time to provide more time on task and improve student achievement.

Governance reforms. Superintendents would use their new management authority to push school improvement by evaluating principals and reward good performance

through individual contracts varying in term and amount reflecting performance. In some instances, a change of the school leadership would be warranted. Principals would be given the authority to select staff for their schools.

*Using the foundation budget as a template.* The foundation budget is essentially a zero-based budget which details the kind and amount of expenditures for school districts. For school committees and other municipal officials, the formula would provide a guide to what level of investment was appropriate.

Ultimately, one would measure progress by results. Three assessments would detail progress:

- ▶ The new state assessments now known as the Massachusetts Comprehensive Assessment System (MCAS) tests would measure student achievement at appropriate intervals.
- ▶ A "certificate of mastery" would be awarded to those who had attained an even higher level of achievement -- and the Commonwealth would measure the rise of the numbers of certificates annually.
- ▶ For the number of non-college bound learners, a "certificate of occupational proficiency" would recognize the skills and knowledge of their programs in vocational and comprehensive schools.

However, not all of the tools to measure progress have been put into place. Therefore, the Educational Management Accountability Board has used the available indicators of achievement or progress: the previous state assessment program (MEAP) which ran from 1986 to 1996; the 1998-99 MCAS scores, the Iowa reading results; SAT scores; drop-out rates, any commercially-available standardized tests used by the district; and any accreditation reports assembled by the New England Association of Schools and Colleges (NEASC).

In addition, the Board hoped to address certain questions which arose as the Act was being implemented:

- Was the minimum contribution required under the Act, the maximum being contributed by the municipality?
- Were principals being unfairly treated by the superintendents with the new performance-based contracts?
- ▶ Was the Act improving student achievement?

## II. New Investments: Municipal & State Commitments

## **Spending Requirements**

The audits have found that the state and local school districts have met the funding goals of ERA. School districts are meeting the foundation budgets and net school spending requirements that the ERA created. In addition, municipalities in many cases are investing more in education than the education reform formula requires. Despite increased municipal spending, the state share of school operational budgets has increased since the implementation of Education Reform.

## Finding-1. School districts have attained the target of 100% of their foundation budgets in FY2000 and appear poised to spend more than the target.

School districts under the overall foundation budget target in fiscal year 1994 have made *significant* progress in reaching the 100% target level set for fiscal year 2000. By fiscal year 1998 all audited districts spent 94% or greater of their respective foundation budget targets. The Department of Education issued required net school spending targets for all school districts for fiscal year 2000. According to these figures, all audited districts are expected to achieve more than the 100% target for the foundation budget in fiscal year 2000.

TABLE A. REACHING THE GOAL: ACHIEVING THE FOUNDATION BUDGET.

School District	FY93 Pct. of Foundation Target	FY 98 Pct. of Foundation Target	FY00 Pct. of Required Foundation
Auburn	105%	112%	110%
Braintree	101%	108%	107%
Brockton	71%	94%	101%
Cambridge	160%	153%	180%
East Longmeadow	92%	109%	104%
Everett	85%	99%	101%
Gardner	71%	94%	101%
Lexington	139%	146%	121%
Lowell	77%	94%	101%
Malden	89%	114%	101%
Milton	102%	107%	104%
New Bedford	73%	95%	104%
North Attleborough	81%	98%	101%
North Reading	96%	102%	102%
Salem	93%	100%	102%
Triton RSD	100%	101%	101%
Woburn	111%	107%	113%
Worcester	85%	98%	101%
Group Average	96%	107%	109%
Group Median	93%	102%	102%
State Average	95%	107%	105%

Finding-2. The state share of school operational budgets has increased since the implementation of Education Reform.

The total amount of Chapter 70 state aid for education has increased significantly since the implementation of education reform. As a result, the state's share of the district's actual net school spending has increased from fiscal year 1994 to fiscal year 1998 for all districts except for Malden where the state's share decreased by 1.3 percentage points. As Table B illustrates, in a number of urban districts, the state is the majority stakeholder in the finances of the district.

TABLE B. THE STATE'S SHARE OF EDUCATION FINANCING. (RANKED BY FY98 STATE SHARE.) (Net School Spending)

School District	FY93 state share	FY98 state share	Percentage Point Change
New Bedford	85.5%	86.8%	1.4%
Brockton	65.6%	77.6%	12.0%
Lowell	58.1%	77.6%	19.6%
Gardner	65.0%	72.8%	7.8%
Worcester	50.5%	64.4%	13.9%
North Attleborough	35.1%	43.8%	8.7%
Malden	41.3%	40.0%	-1.3%
Triton (RSD)	28.0%	35.3%	7.3%
Everett	12.7%	32.2%	19.5%
Salem	15.2%	25.4%	10.2%
Auburn	22.0%	23.0%	1.0%
East Longmeadow	15.0%	18.8%	3.7%
North Reading	8.4%	13.1%	4.8%
Braintree	7.2%	10.3%	3.2%
Woburn	6.4%	10.3%	4.0%
Milton	5.7%	8.9%	3.2%
Lexington	5.6%	7.6%	1.9%
Cambridge	3.1%	5.3%	2.2%
Group Average	37.7%	48.9%	11.2%
Group Median	10.7%	24.7%	14.0%
State Average	32.2%	39.5%	7.3%

Finding-3. School districts are meeting net school spending requirements.

Finding-4. The minimum is not the maximum: municipalities have been investing more than the minimum required by the formula.

Net school spending requirements must be met by school districts each year. Only certain funding can be used to meet that requirement. Once the amount of state aid is determined, the difference between state aid and the total net school spending required amount must be paid for with local funds. That amount is referred to as the minimum local contribution.

In some communities in the first few years of the Act, it was stated that the minimum contribution required by law had, in essence, become the maximum contribution given

the political dynamics in the community. In other words, the complaint was "the minimum was the maximum". Whether there is now greater understanding of the law or whether the changed economic times have allowed for greater largesse, the fact is that, in most municipalities, the investment in local school districts exceeds the minimum requirements, sometimes substantially so.

Generally, municipalities have met their local contribution requirements. Only the city of Lowell failed to meet its fiscal year 1998 minimum contribution requirement.

TABLE C. COMPARISON OF NET SCHOOL SPENDING (NSS) FROM FY94-98; (IN \$MILLIONS)

	FY94			FY98		
School District	Required NSS	Actual NSS	Target Met?	Required NSS	Actual NSS	Target Met?
Auburn	\$11.1	\$11.5	Yes	\$13.2	\$13.5	Yes
Braintree	\$23.6	\$24.0	Yes	\$27.5	\$29.0	Yes
Brockton	\$59.4	\$61.5	Yes	\$97.1	\$97.8	Yes
Cambridge	\$75.5	\$77.0	Yes	\$83.7	\$88.1	Yes
East Longmeadow	\$10.5	\$10.6	Yes	\$13.1	\$14.4	Yes
Everett	\$20.7	\$21.1	Yes	\$29.7	\$29.8	Yes
Gardner	\$10.3	\$10.3	Yes	\$14.6	\$14.7	Yes
Lexington	\$32.3	\$32.3	Yes	\$35.8	\$42.3	Yes
Lowell	\$61.5	\$67.1	Yes	\$106.5	\$103.2	No
Malden	\$27.3	\$28.4	Yes	\$32.3	\$38.5	Yes
Milton	\$16.7	\$16.8	Yes	\$20.8	\$22.4	Yes
New Bedford	\$64.4	\$66.8	Yes	\$87.3	\$87.4	Yes
North Attleborough	\$15.6	\$15.9	Yes	\$20.3	\$21.7	Yes
North Reading	\$9.3	\$9.4	Yes	\$11.7	\$12.2	Yes
Salem	\$23.5	\$25.5	Yes	\$30.2	\$31.5	Yes
Triton (RSD)	\$6.4	\$6.4	Yes	\$17.8	\$18.4	Yes
Woburn	\$23.7	\$26.0	Yes	\$27.3	\$29.0	Yes
Worcester	\$107.1	\$110.0	Yes	\$156.4	\$159.0	Yes
Group Subtotal:	\$598.9	\$620.6	-	\$825.3	\$852.9	-
Group Average	\$33.3	\$34.5	-	\$45.9	\$47.4	-
Group Median	\$23.6	\$24.8	-	\$28.6	\$29.4	-

Finding-5. School district spending has increased in real terms since the implementation of Education Reform.

Net school spending has increased significantly from fiscal year 1993, the year before additional state aid became available as a result of the Act, to fiscal year 1998. Audited districts, as a group, increased net school spending by 47.6%. This increase parallels the state average increase of 50.1% for that period. As Table D illustrates, all districts increased their net school spending *faster* than the rate of inflation. Using the "State

and Local Government Implicit Price Deflator" issued by the US Department of Commerce, the cumulative inflation rate for the fiscal year 1993 to fiscal year 1998 period was 11.5%. Only Woburn was close to the rate of inflation as it increased spending by the lowest percentage, 12.0%.

Increases in spending were driven by mandated net school spending requirements set by the Act as codified in M.G.L. Chapter 70.

TABLE D. INCREASE IN ENROLLMENT AND NET SCHOOL SPENDING (NSS) FY93-98; (RANKED BY ENROLLMENT CHANGE).

School District	FY93-98 Enrollment Change	FY93-98 NSS Change	FY93 NSS/ Enrollment	FY98 NSS/ Enrollment	FY93-98 % Change in NSS/ Student
Lowell	21.5%	69.2%	\$4,682	\$6,522	39.3%
Salem	18.8%	38.9%	\$5,506	\$6,438	16.9%
Milton	18.5%	38.2%	\$5,277	\$6,154	16.6%
Worcester	18.2%	54.6%	\$5,062	\$6,622	30.8%
Cambridge	16.7%	21.1%	\$9,644	\$10,011	3.8%
Lexington	16.6%	35.1%	\$7,374	\$8,540	15.8%
North Reading	16.3%	36.3%	\$4,989	\$5,844	17.1%
North Attleborough	16.3%	51.7%	\$3,971	\$5,177	30.4%
Everett	13.6%	51.0%	\$4,880	\$6,486	32.9%
Brockton	12.1%	75.2%	\$4,090	\$6,393	56.3%
Gardner	11.6%	55.3%	\$3,852	\$5,361	39.2%
East Longmeadow	10.7%	43.5%	\$4,563	\$5,912	29.6%
Braintree	5.9%	24.9%	\$5,352	\$6,314	18.0%
Auburn	5.4%	23.6%	\$5,262	\$6,170	17.2%
Woburn	3.9%	12.1%	\$5,998	\$6,475	8.0%
New Bedford	2.1%	45.7%	\$4,415	\$6,300	42.7%
Malden	-0.2%	44.5%	\$5,045	\$7,309	44.9%
Triton (RSD)	N/A	N/A	\$5,188	\$5,697	N/A
Group Average	13.0%	47.6%	\$5,286	\$6,540	26.1%
FY93-98 Inflation Rate					11.5%

## III. New Investments: Where did the money go?

School districts have used Education Reform funds to hire new teachers, reduce student/teacher ratios, increase teacher salaries, reinstate and expand programs, invest in professional development and invest in textbooks and technology. However, despite these investments, foundation budget targets for specific expenditures have not been achieved and little attention has been paid to technology plans. In addition, costs related to special education services absorbed a disproportionate amount of the new financial resources.

Salary spending has increased by 30.3%, benefit spending has increased by 12.4% and non-salary spending has increased by 75.2% for the group of audited school districts.

#### Finding-6. School districts have hired new teachers

All of the districts have increased the number of teachers significantly except for East Longmeadow where the number of teachers appears to have decreased.

TABLE E. NUMBER OF TEACHERS (FTE); (RANKED BY THE % INCREASE IN THE NUMBER OF TEACHERS.)

#### 1997-98 audits

Woburn Cambridge

Auburn

**Group Average** 

Group Median

**State Total** 

	School District	FY93	FY97	FY98	Incr./Decr.	FY93-97 % Change
	Lexington	297.0	398.0		101.0	34.0%
	Lowell	839.0	1,102.0		263.0	31.3%
	Triton (RSD)	183.3	237.7		54.4	29.7%
	Brockton	818.0	1,035.0		217.0	26.5%
	Worcester	1,468.0	1,805.0		337.0	23.0%
	Malden	336.0	401.0		65.0	19.3%
	Gardner	138.0	162.0		24.0	17.4%
	Salem	305.5	347.4		41.9	13.7%
	Braintree	296.9	333.0		36.1	12.2%
	North Reading	116.4	128.3		11.9	10.2%
	New Bedford	900.2	958.3		58.1	6.5%
	East Longmeadow	186.4	159.0		-27.4	-14.7%
	Group Average	490.4	588.9		98.5	20.1%
	Group Median	301.3	372.7		71.5	23.7%
	State Total	57,079.8	64,368.9		7,289.1	12.8%
1999-2000	) audits	,				
	School District	FY93	FY97	FY98	Incr./Decr.	FY93-98% Change
	Everett	247.0		333.0	86.0	34.8%
	North Attleborough	229.2		296.6	67.4	29.4%
	Milton	220.8		244.3	23.5	10.6%

Note: Data obtained from school district review reports and DOE. State Total data obtained from DOE and may include certified teachers in administrative positions.

329.8

692.2

157.0

342.2

313.2

69,044.5

31.1

19.0

4.1

38.5

75.1

11,964.7

10.4%

2.8%

2.7%

12.7%

31.5%

21.0%

Finding-7. Most school districts have reduced student/teacher ratios.

298.7

673.2

152.9

303.6

238.1

57,079.8

Several school districts had notable increases in student population. Some commentaries have suggested that these districts were unable to cope with the increases in enrollment even as they added staff.

Despite increased enrollment in many of the audited districts, most districts achieved significant declines in student to teacher ratios. However, four districts experienced an increase in their overall student to teacher ratio.

TABLE F. CHANGE IN STUDENT/TEACHER RATIOS (RANKED BY PERCENTAGE OF CHANGE).

School District	FY93	FY97	FY98	Change	% Change
Malden <sup>1</sup>	16.5	14.1		-2.4	-14.5%
Lowell	16.8	14.4		-2.4	-14.3%
Triton (RSD)	16.0	13.8		-2.2	-13.8%
Lexington <sup>1</sup>	15.8	13.7		-2.1	-13.3%
Brockton <sup>1</sup>	15.4	13.5		-1.9	-12.3%
Worcester	14.6	13.1		-1.5	-10.3%
Braintree	15.3	14.3		-1.0	-6.5%
New Bedford	16.0	15.3		-0.7	-4.4%
Gardner	19.0	18.3		-0.7	-3.7%
Salem	14.6	14.1		-0.5	-3.4%
North Reading	15.8	17.1		1.3	8.2%
East Longmeadow	13.0	15.9		2.9	22.3%
Group Average	15.7	14.8		-0.9	-5.9%
Group Median	15.8	14.2		-1.6	-10.1%
State Average	15.1	14.5		-0.6	-4.0%
1999-2000 Audits					
North Attleborough	16.7		15.0	-1.7	-10.2%
Everett	16.9		15.4	-1.5	-8.9%
Woburn	15.3		14.2	-1.1	-7.2%
Cambridge	11.7		11.1	-0.6	-5.1%
Milton	15.2		16.1	0.9	5.9%
Auburn	14.4		15.4	1.0	6.9%
Group Average	15.0		14.5	-0.5	-3.3%
Group Median	15.3		15.2	-0.1	-0.3%
State Average	15.1		14.2	-0.9	-6.0%

Note: Data obtained from school district review reports and DOE. Student/Teacher ratios may not represent actual class size.

### Finding-8. The average teacher salary increased in all districts.

In all audited districts, teacher salaries increased. There has been some public discussion as to whether or not additional state aid has been spent simply on salary increases for teachers. All districts have collective bargaining agreements that

<sup>&</sup>lt;sup>1</sup> indicates students per instructional staff.

incorporate salary schedules for teachers. Salaries and salary increases are generally based on three criteria: academic degree, additional academic credits and annual "steps" or increases. The academic degree held by a teacher determines which salary "lane" the teacher is placed on, usually bachelor, master and doctoral degrees. Additional lanes are sometimes used for additional credits earned by a teacher pursuing another degree. For example, there may be a salary lane for a master's degree or for a master degree plus 15 additional credit hours. Annual step increases are also incorporated into each lane. Once a teacher has reached the top step in the salary lane, annual increases are available only to the extent that a new salary schedule is put into effect. That occurs usually as a result of annual collective bargaining increases in the salary schedules.

### Finding-9. Salary schedules have outpaced inflation.

The following tables illustrate how salary schedules have changed in school districts. Only the lowest starting salary and the highest lane/highest step salaries are shown to provide a snapshot of the total salary range in effect in these districts.

Grouping districts by years for which data was available, the following chart shows increase in salaries over several years. Cumulative inflation from FY93 to FY98 was 11.5%.

TABLE G. TEACHING SALARY SCHEDULES: MINIMUM AND MAXIMUM SALARY LEVEL INCREASES

		Minimum Salary Level		Maximum Salary Level	
		Increase	Change	Increase	Change
Auburn	FY93-98	\$4,236	17.6%	\$7,284	17.6%
Braintree	FY93-98	\$4,123	18.7%	\$8,666	18.7%
Cambridge	FY93-98	\$4,172	16.2%	\$7,579	15.2%
East Longmeadow	FY93-98	\$3,919	15.4%	\$7,561	18.8%
Everett	FY93-98	\$6,748	29.5%	\$13,009	29.5%
Milton	FY93-98	\$3,425	15.4%	\$7,402	16.5%
New Bedford	FY93-98	\$4,270	19.3%	\$11,743	31.8%
North Attleborough	FY93-98	\$4,149	20.6%	\$9,168	23.4%
Woburn	FY93-98	\$4,021	17.0%	\$11,908	28.7%
Group Average		\$4,340	18.9%	\$9,369	22.3%
Gardner	FY93-97	\$5,377	23.9%	\$9,386	23.9%
Lowell	FY93-97	\$6,229	28.3%	\$9,276	24.6%
North Reading	FY93-97	\$3,230	13.6%	\$5,687	13.6%
Salem	FY93-97	\$4,146	19.3%	\$6,102	15.4%
Worcester	FY93-97	\$4,181	19.3%	\$9,750	24.0%
Group Average		\$4,633	20.9%	\$8,040	20.3%
Brockton	FY94-96	\$1,880	8.2%	\$3,990	8.8%
Lexington	FY95-97	\$1,240	4.5%	\$3,700	6.3%
Malden	FY94-96	\$1,184	5.6%	\$3,915	8.7%
Triton (RSD)	FY94-97	\$1,827	8.2%	\$5,453	12.5%

Note: Data obtained from school district review reports

The average teacher salary is one indicator of compensation. However, this indicator is often skewed by the variations within the teacher population. Teacher salary rates are based on years of service. Schools with a high proportion of experienced teachers will have a higher average teacher salary than those in which a higher proportion of new teachers has been hired.

TABLE H. AVERAGE PAY OF A TEACHER, FY93-FY98; (RANKED BY PERCENTAGE INCREASE)

School District	FY93	FY98	Change	% Change
Lowell	\$31,021	\$47,202	\$16,181	52.2%
East Longmeadow	\$29,160	\$38,953	\$9,793	33.6%
Everett	\$31,908	\$41,932	\$10,024	31.4%
Gardner	\$31,893	\$41,145	\$9,252	29.0%
Malden	\$41,174	\$50,625	\$9,451	23.0%
New Bedford	\$33,297	\$40,888	\$7,591	22.8%
Salem	\$34,960	\$42,477	\$7,517	21.5%
Milton	\$36,632	\$43,915	\$7,283	19.9%
Braintree	\$40,533	\$48,252	\$7,719	19.0%
Worcester	\$34,998	\$41,488	\$6,490	18.5%
Cambridge	\$44,016	\$51,591	\$7,575	17.2%
North Reading	\$40,178	\$47,105	\$6,927	17.2%
Lexington	\$50,178	\$57,169	\$6,991	13.9%
North Attleborough	\$34,568	\$38,837	\$4,269	12.3%
Brockton	\$41,244	\$46,054	\$4,810	11.7%
Auburn	\$38,598	\$42,914	\$4,316	11.2%
Woburn	\$44,805	\$48,664	\$3,859	8.6%
Triton (RSD)	N/A	\$45,110	N/A	N/A
Group Average	\$37,598	\$45,240	\$7,642	20.3%
Group Median	\$36,632	\$44,513	\$7,881	21.5%
State Average	\$38,681	\$44,051	\$5,370	13.9%
Fy93-98 Inflation				11.5%

Note: Data obtained from DOE - Triton RSD became fully regionalized in FY95

Finding-10. The allocation for art, music and physical education programs increased in the districts reviewed. Programs in art, music and physical education were restored in districts which had eliminated them prior to the Act.

One concern has been the diminishment of other classroom opportunities in the late 1980's and early 1990's. Art, music, and physical education may provide creative outlets for students to express themselves or find new interests. There is some research to support the premise that opportunities in art and music enhance student performance in more traditional academic disciplines.

In addition to smaller class sizes, districts restored courses such as art, music and other enrichment opportunities for students. The allocation for art, music and physical education programs increased in all districts for which information was available. In those districts that cut back on these offerings, classes were restored.

TABLE I. INCREASES IN ART, MUSIC AND PHYSICAL EDUCATION OF SELECTED DISTRICTS, FY93-98 (THOUSANDS)

		Art/Music			Phys. Ed	d
School District	FY93	FY98	% Change	FY93	FY98	% Change
Braintree	\$790	\$995	25.9%	\$631	\$721	14.3%
Cambridge	\$1,707	\$2,321	36.0%	\$1,285	\$1,993	55.1%
Gardner	\$151	\$376	149.0%	\$185	\$268	44.9%
Milton	\$428	\$609	42.3%	\$392	\$546	39.3%
North Reading	\$266	\$393	47.7%	\$225	\$274	21.8%
Woburn	\$476	\$646	35.7%	\$471	\$661	40.3%
Worcester <sup>1</sup>	\$2,200	\$3,300	50.0%	\$1,400	\$1,900	35.7%

Note: Data obtained from school district review reports - 1 FY97 data replaces FY98.

Note: Categorically separated art, music and physical education data was not available in all districts audited.

### Finding-11. Schools have invested in textbooks and other education supplies.

There has been a substantial reinvestment in textbooks and other educational supplies. However, as of the audit date, only 7 districts (Brockton, Cambridge, Lexington, Lowell, Malden, North Reading and Worcester) of the 18 audited districts had met the foundation budget target for this category.

TABLE J. PER PUPIL EXPENDITURES FOR BOOKS AND EQUIPMENT

School District	\$ FY94	\$ FY98	\$ Change	% Change
Malden	\$44	\$337	\$293	672%
Worcester	\$56	\$409	\$354	633%
Brockton	\$87	\$399	\$311	357%
Lowell	\$88	\$372	\$283	322%
Woburn	\$67	\$224	\$157	237%
Braintree	\$112	\$285	\$173	154%
Auburn	\$86	\$188	\$103	120%
Milton	\$169	\$293	\$124	73%
Everett	\$146	\$250	\$104	71%
Gardner	\$125	\$214	\$89	71%
Cambridge	\$306	\$509	\$204	67%
North Reading	\$264	\$392	\$128	49%
Lexington	\$291	\$427	\$136	47%
New Bedford	\$185	\$268	\$82	44%
East Longmeadow	\$208	\$290	\$82	40%
Salem	\$216	\$271	\$55	25%
North Attleborough	\$224	\$244	\$20	9%
Triton (RSD)	\$548	\$245	(\$303)	-55%

Note: Data obtained from DOE end-of-year reports. Foundation enrollment used - Percentages may not calculate due to rounding

## Finding-12. School districts have invested significant sums in professional development.

If there was one singular success of the Act, it has been that there is now a significant level of investment in professional development. In particular, one provider, the Research for Better Teaching, appeared as a collaborator on professional development in many of the districts which were audited.

However, there is a continued concern about the effectiveness of the investment in professional development. If a professional development plan is not tailored to the individual teacher's weaknesses and the needs of the school, then it is largely process without purpose. In a number of the audited districts, it was difficult to ascertain the focus of a district's professional development plan.

TABLE K. INVESTMENT IN PROFESSIONAL DEVELOPMENT (IN \$THOUSANDS)

School District	FY94	FY98	Increase	% Change
Auburn	\$0	\$193	\$193	N/A
Braintree	\$17	\$253	\$236	1388%
Brockton	\$0	\$455	\$455	N/A
Cambridge	\$716	\$853	\$137	19%
East Longmeadow	\$45	\$184	\$139	309%
Everett	\$6	\$224	\$218	3633%
Gardner	\$20	\$142	\$122	610%
Lexington	\$75	\$330	\$255	340%
Lowell	\$318	\$1,105	\$787	247%
Malden	\$8	\$399	\$391	4888%
Milton	\$0	\$78	\$78	N/A
New Bedford	\$150	\$1,000	\$850	567%
North Attleborough	\$80	\$316	\$236	295%
North Reading	\$0	\$72	\$72	N/A
Salem	\$84	\$414	\$330	393%
Triton (RSD)	\$99	\$323	\$224	226%
Woburn	\$0	\$155	\$155	N/A
Worcester	\$104	\$3,237	\$3,133	3013%

Note: Data obtained from DOE end-of-year reports

Finding-13. The foundation budget targets for specific expenditures have not been achieved.

It is important to note that the Act did not mandate that any school district spend its new dollars in any particular manner. Beginning with the bill reported to the House floor in January of 1993 (House 800 of 1993), and in all subsequent drafts of the Act, the proponents of reform wanted to provide local policy-makers and educational administrators with a great deal of latitude to address the issues which are apparent at the local level. The consensus of opinion was that local educators better understood the needs of the district and would address the needs prudently.

However, it is also significant that state policymakers wanted to "trust but verify" their local counterparts. State lawmakers were confronted with a number of investments which were sought to be addressed by the new funding - increased professional development, new textbooks and instructional materials, more opportunities for afterschool activities and capital improvements to the schools. As a result, a requirement was established to report the school districts' expenditures on these four items (M.G.L. Ch.70 §9) and to explain to the Commissioner of Education in a letter why the district did not meet the foundation target expenditures in these areas. This provision appropriately balanced the interests of freedom from a mandate and accountability.

The Act mandated that a superintendent must file a letter with the Commissioner of Education if the school district fails to spend the foundation allocations for expanded programs (after-school activities), extraordinary maintenance, professional development and for books and equipment. In that letter, the superintendent must detail the reasons for the district's failure to meet the recommended expenditures. DOE has not implemented this provision. None of the audited districts had complied with the law. In each of the audited districts, the superintendent was unaware of the requirements of this provision of the law.

It was evident from discussions with business managers and superintendents and from an analysis of expenditures that the foundation budget target for specific expenditures was not used to develop the school district budget. Opinions expressed by school officials indicated that the foundation budget did not reflect the current spending or budget needs of the district.

Only Worcester reported fiscal year 1998 expenditures for expanded programs and only eight districts reported fiscal year 1998 expenditures for extraordinary maintenance. No district came close to its foundation budget in either category although Worcester most closely approximated the ideal.

TABLE L. NET SCHOOL SPENDING FOR KEY AREAS AS A PERCENTAGE OF ITS FOUNDATION BUDGET

School District Exp		d Programs	Extraordinary Maintenance		Professional Development		Books & Equipment	
	FY94	FY98	FY94	FY98	FY94	FY98	FY94	FY98
Auburn	0.0%	0.0%	0.0%	38.9%	0.0%	102.1%	28.6%	57.6%
Braintree	0.0%	0.0%	0.0%	27.9%	4.7%	59.3%	37.5%	87.2%
Brockton	0.0%	0.0%	0.0%	95.8%	0.0%	26.8%	29.6%	122.6%
Cambridge	0.0%	0.0%	0.0%	25.2%	97.4%	90.6%	99.5%	155.7%
East Longmeadow <sup>1</sup>	0.0%	0.0%	2.2%	0.0%	25.3%	57.9%	69.2%	56.8%
Everett	0.0%	0.0%	0.0%	0.0%	1.5%	46.0%	47.1%	73.3%
Gardner	0.0%	0.0%	8.9%	0.0%	9.0%	57.9%	42.6%	66.2%
Lexington <sup>2</sup>	0.0%	0.0%	0.0%	5.3%	21.5%	71.4%	119.6%	130.8%
Lowell	0.0%	0.0%	0.0%	0.0%	23.9%	61.3%	31.3%	116.8%
Malden	0.0%	0.0%	0.0%	0.0%	1.6%	73.5%	14.6%	103.5%
Milton	0.0%	0.0%	0.0%	81.5%	0.0%	23.5%	58.1%	91.7%
New Bedford <sup>1</sup>	0.0%	0.0%	0.0%	0.0%	11.4%	47.4%	63.9%	76.1%
North Attleborough	0.0%	0.0%	12.6%	23.6%	28.3%	92.1%	75.5%	76.3%
North Reading <sup>1</sup>	0.0%	0.0%	0.0%	0.0%	0.0%	73.0%	88.0%	114.1%
Salem	0.0%	0.0%	0.0%	3.3%	21.4%	81.1%	71.8%	83.6%
Triton (RSD) <sup>2</sup>	0.0%	0.0%	0.0%	0.0%	42.5%	112.2%	72.4%	76.1%
Woburn	0.0%	0.0%	0.0%	0.0%	0.0%	35.9%	22.2%	69.5%
Worcester	0.0%	69.5%	60.4%	53.2%	5.3%	122.1%	19.1%	117.3%
Group Average	0.0%	3.9%	4.7%	19.7%	16.3%	68.6%	55%	93.1%
Group Median	0.0%	0.0%	0.0%	1.7%	7.2%	66.4%	52.6%	85.4%

Finding-14. The investment in technology has increased significantly, however, with little attention paid to the districts' technology plans.

Nearly every school district audited had a long-range technology plan in place. The plans are generally used to schedule appropriate infrastructure, hardware and software upgrades over a period of time. Of the fifteen districts that had technology plans in place only one district, Cambridge, approached meeting the plan's funding goals.

#### TABLE M. TECHNOLOGY PLANS AND INVESTMENTS

<sup>&</sup>lt;sup>1</sup> FY97 data used (instead of FY98).

<sup>&</sup>lt;sup>2</sup> FY95 data used (instead of FY94).

District	1998/99 Students per Computer	Projected \$ on technology plan (in millions)	Expended (millions)	% of projection	As of Report Date
Auburn	8.6	\$2.0	\$.74	38%	3rd year
Braintree	5.1	\$5.0	N/A	N/A	3rd year
Brockton	8.2	N/A	N/A	N/A	5yr plan
Cambridge	DNR	\$3.2	2.9	95%	4th year
East Longmeadow	7.6	*Did not meet tech plan	N/A	N/A	5th year
Everett	8.0	\$9.1	\$.77	8.6%	2nd year
Gardner	6.7	*Did not meet tech plan	N/A	N/A	4th year
Lexington	3.9	\$6.1	N/A	N/A	3rd year
Lowell	3.9	\$21.8 starting in FY98	N/A	N/A	N/A
Malden	11.3	\$9.1	N/A	N/A	N/A
Milton	DNR	N/A	N/A	N/A	2 <sup>nd</sup> yr (2 yr plan)
New Bedford	7.3	N/A	N/A	N/A	5 year
North Attleborough	7.0	\$3.9	1.4	35%	2nd year
North Reading	9.3	\$5.3	\$.86	16.3	4th year
Salem	4.1	\$711,724	N/A	N/A	2nd year
Triton	7.6	N/A	N/A	N/A	N/A
Woburn	9.5	\$5.0	\$.87	17.60%	4th year
Worcester	5.6	\$15.9	N/A	N/A	2nd year

Note: DNR - did not report

## Finding-15. Costs related to special education services absorbed a disproportionate amount of the new financial resources.

A continuing concern for state and local policymakers is the amount of educational funding that is directed to special education (SpEd) services. Over the past few years, there have been other reports that have found that a significant amount of the new funds went to pay for such services. Our audits confirmed this trend. In every district, the amount of money for SpEd services rose faster than the overall school budget, as measured by the Net School Spending (NSS) of the district. It is also notable that the pressure on school budgets was greatest in suburban districts that were not principal beneficiaries of the reform formula.

The following table illustrates the fiscal impact of special education services during the period FY94-98.

#### TABLE N. SPECIAL EDUCATION COSTS (MILLIONS)

School District	FY93-98 SPED Increase	FY93-98 NSS Increase	SPED Increase / NSS Increase
Woburn	\$1.2	\$3.1	38.7%
Lexington	\$4.0	\$11.0	36.4%
Salem	\$3.2	\$8.8	36.4%
Braintree	\$1.9	\$5.8	32.8%
North Reading	\$0.9	\$3.2	28.1%
Cambridge	\$4.2	\$15.4	27.3%
Everett	\$2.7	\$10.1	26.7%
Malden	\$3.1	\$11.9	26.1%
Milton	\$1.6	\$6.2	25.8%
New Bedford	\$6.7	\$27.4	24.5%
North Attleborough	\$1.8	\$7.4	24.3%
Gardner	\$1.2	\$5.2	23.1%
East Longmeadow	\$1.0	\$4.4	22.7%
Lowell	\$8.8	\$42.2	20.9%
Auburn	\$0.5	\$2.5	20.0%
Worcester	\$11.1	\$56.1	19.8%
Brockton	\$7.2	\$42.0	17.1%
Triton (RSD)	NA	\$12.3	NA
Group Subtotal:	\$64.3	\$275.0	23.4%

## IV. Governance & Management Reform

Strong leadership and good management practices are key to school improvement. However, many districts have not fully implemented good management practices. Most districts have not utilized governance changes establishing performance-based contracts for principals. While nearly all schools have created school improvement plans, many plans do not address student performance or test results. While most school districts have met the minimum Time & Learning requirement, few districts have extended the school year.

- Finding-16. Most districts have not utilized governance changes establishing performance-based contracts for principals.
- Finding-17. In most districts, in terms of the principals' contracts, principals were essentially treated as if the Education Reform Act had not been enacted.

To establish a more responsive, more professional cadre of principals, who would focus on the results of student performance, the Education Reform Act removed principals from collective bargaining units. However, the new management powers were largely unused by superintendents.

TABLE O. PLANNING FOR SUCCESS AND STUDENT ACHIEVEMENT

	District Strategic Plan	School Improvement Plans	SIP Address Student Performance/ Test Results	Individual Contracts for Principals	Variable Length of Contract Term	Salary Increases Tied to Performance
Everett	•	•	•	•	•	•
Worcester	•	•	•	•	•	•
Milton	•	•	•	•	•	•
Lowell	•	•	•	•	•	
Auburn	•	•	•	•		•
North Reading	•	•	•	•		•
Braintree	•	•	•	•		
Cambridge	•	•	•	•		
Lexington	•	•	•	•		
New Bedford	•	•	•	•		
East Longmeadow		•	•	•		•
Gardner		•	•	•		
Triton	•	•				
North Attleborough	•			•		
Malden		•		•		
Woburn		•		•		
Brockton		•				
Salem		•				

Superintendents have been loath to exercise this power. There are several reasons behind superintendents' failure to utilize this tool, including the additional work required to establish differentiated contracts, the necessity of effective, and fair evaluations and the courage to implement unpopular change.

In most instances, if the term of the principals' contracts did not vary, then the term was simply three years. The allegation has been made that all principals are getting one year contracts. There is little evidence to support any assertion that the authority given to superintendents to negotiate variable contracts with principals has been abused.

## Finding-18. Nearly all schools have created school improvement plans but many plans do not address student performance or test results.

Although the focus of the Reform Act was the improvement of student performance, the message has not yet been heard by all schools or school districts. Six of the audited eighteen districts have school improvement plans in place which do not address student performance, test results or other measurable indicators of student achievement. (See Table O.)

## Finding-19. Most school districts have met the minimum Time & Learning requirement; however few districts have extended the school year.

Both state and national studies have demonstrated that our students do not attend school either on a daily or an annual basis to the same extent as students in other countries. As one goal of the Reform Act is to make Massachusetts students more internationally competitive, increasing the amount of instructional time is one means to advance student achievement.

Beginning in fiscal year 1997 school districts were required to provide 990 hours per year of student learning time for secondary grades and 900 hours for elementary grades. Districts were given the option of categorizing middle schools either as secondary or elementary schools for this purpose.

For the 1997/98 school year (FY98) Salem had 979 hours and did not meet time in learning requirements. It should be noted that they met the requirement in the following school year - the district met the secondary standard with 1008 hours.

TABLE P. TIME AND LEARNING IN AUDITED DISTRICTS

	Minimum Elementary	Minimum Secondary	More than 180 days	More than 185 days
Agawam	•	•		
Auburn	•	•		
Braintree	•	•		
Brockton	•	•		
Cambridge	•	•		
East Longmeadow	•	•		
Everett	•	•	•	
Gardner	•	•		
Lexington	•	•		
Lowell	•	•		
Malden	•	•		
Milton	•	•		
New Bedford	•	•		
North Attleborough	•	•		
North Reading	•	•	•	
Salem	•	•		
Triton	•	•		
Woburn	•	•		
Worcester	•	•		

## V. Student Performance

## Measuring Student Success

While the funding goals of education reform have been achieved, the student performance goals have not. Strong improvement in student results is not yet visible. While additional funding has allowed districts that were performing well or improving prior to ERA to continue on the right path, it has not created improved student performance for other districts. Districts that have not established good management practices, have weak leadership, do not have clearly defined district-wide and school improvement plans and goals, or have not aligned curriculum to the state frameworks have not achieved student performance.

The audits found that there is little correlation between the increased investment in the classroom and improved test scores. Also, significant MCAS improvement is not yet apparent and is necessary in many districts; some districts' test results surpassed demographic predictors; and SAT participation rates have declined significantly in several of the audited districts.

Finding-20. Thus far, there is little correlation between the increased investment in the classroom as measured by per pupil net school spending, and academic achievement as measured by test scores.

Correlation analysis measures how closely two different sets of data are related, or how they correlate. The outcome of a correlation analysis is a range of values between minus one and plus one. At plus one, two sets of data are perfectly correlated while at a value of minus one the sets of data are perfectly inversely related. A value of zero indicates that there is no correlation at all.

Comparing net school spending and student test scores in the 18 districts revealed that there is almost no relationship. Correlation coefficients for 1998 net school spending and four different test score results yielded values between minus 0.1 and plus 0.07.

Per Student Spending	TEST SCORE	Correlation
NSS per Student FY98	1998 MCAS Total Score	.01
NSS per Student FY98	1998 Combined Advanced & Proficient Scores	.03
NSS per Student FY98	1998 SAT Score	.07
NSS per Student FY98	1997 10 <sup>th</sup> Grade Iowa Percentile Rank	10

### Finding-21. Some districts' test results surpassed demographic predictors.

There is a strong correlation between per capita income and student test scores in the 18 audited districts. Dr. Robert Gaudet, of the University of Massachusetts, has done extensive work in this area. The correlation between 1989 per capita income and 1998 MCAS test scores results in a correlation coefficient of 0.84 for the audited districts suggesting that per capita income plays a fairly strong role in test score results.

Wealth	Test Score	CORRELATION
1989 Per Capita Income	1998 MCAS Total Score	.84

School districts with favorable demographics are expected to do better than districts with less favorable demographics. A real measure of success is most likely the degree to which a school district performs better than expected based on its demographic characteristics. School districts that performed better than expected include Auburn, Braintree, Gardner, East Longmeadow, Everett, North Reading, Woburn and Worcester. It is notable that Everett and Worcester are two districts that have implemented nearly all of the new governance provisions provided by the law and have also improved student performance. Auburn and North Reading are two additional districts that have also implemented many of the governance provisions provided and in which test scores have surpassed demographic predictors. The Board believes that this correlation is not an accident or a fortuitous happenstance.

TABLE Q. COMPARISON OF 1989 PER CAPITA INCOME TO 1998 AND 1999 MCAS TOTAL SCORES

School District	strict   1989 Per Capita   FY98   Income   NSS/Stud		1998 MCAS Total Score	1999 MCAS Total Score
Lexington	30,718	\$8,540	2193	2198
Milton	22,444	+ - / -	2127	2116
Cambridge	19,879		2051	2041
North Reading	19,100	\$5,844	2174	2160
Braintree	18,624	\$6,314	2108	2130
Woburn	18,155	\$6,475	2126	2122
North Attleborough	17,535	\$5,177	2094	2110
Triton (RSD) 1	17,501	\$5,697	2068	2102
Auburn	17,500	\$6,170	2119	2118
East Longmeadow	17,037	\$5,912	2131	2123
Salem	16,155	\$6,438	2025	2029
Malden	15,820	\$7,309	2040	2042
Everett	14,220	\$6,486	2052	2053
Brockton	13,455	\$6,393	1989	1993
Worcester	13,393	\$6,622	2020	2014
Gardner	13,207 \$5,361		2042	2063
Lowell	12,701	\$6,522	1990	1992
New Bedford	10,923	\$6,300	1994	1988

Note: 1 shows average of 3 town per capita incomes

Due to the longer than expected MCAS development process, the Massachusetts Educational Assessment Program (MEAP) was used as a statewide testing tool until 1996. The chart below provides MEAP grade 4 reading scores for the audited districts for two years – 1992 and 1996. The 1992 test was administered prior to the passage of Education Reform. Six of the 18 audited districts improved test scores by 50 points or greater over this time period. (Fifty points is considered to be a significant change in score.) All six of these districts also performed better on the 1998 and 1999 MCAS than demographic predictors indicated.

TABLE R. MEAP GRADE 4 READING SCORES - 1992 AND 1996 (RANKED BY CHANGE)

School District	1992	Over/(Under) State Average	1996	Over/(Under) State Average	1992 – 1996 Change
Everett	1270	-60	1440	90	170
East Longmeadow	1440	110	1530	180	90
Woburn	1350	20	1420	70	70
Worcester	1280	-50	1350	0	70
Braintree	1380	50	1430	80	50
Gardner	1280	-50	1330	-20	50
Malden	1280	-50	1310	-40	30
Lexington	1440	110	1460	110	20
Auburn	1420	90	1420	70	0
New Bedford	1270	-60	1270	-80	0
North Reading	1430	100	1430	80	0
Brockton	1210	-120	1200	-150	-10
Cambridge	1240	-90	1230	-120	-10
Triton (RSD)	1370	40	1360	10	-10
Milton	1460	130	1440	90	-20
North Attleborough	1390	60	1370	20	-20
Lowell	1220	-110	1180	-170	-40
Salem	1370	40	1310	-40	-60
State Average	1330		1350		20

Note: A significant change in a MEAP score is considered to be a change of 50 points.

## Finding-22. SAT participation rates have declined significantly in several of the audited districts.

There are two measures of growth that can be used when reviewing SAT scores. The first is an improvement in the overall school district score. However, an improvement in the overall SAT score can be the result of fewer test participants than previous years. If only high achieving students take the test the overall school score is likely to be higher than it might otherwise be. The second measure is an increase in the test participation rate. Higher participation rates indicate a higher percentage of potential

college applicants as SAT scores are required for admission to most colleges and universities in the North and Eastern United States.

A majority (11) of the audited districts experienced a decline in SAT participation rates from 1995 to 1999; some declines were significant.

TABLE S. SAT SCORES AND PARTICIPATION RATES; (RANKED BY CHANGE IN PARTICIPATION).

School District	1995 Total Score	1999 Total Score	1995 Participation Rate	1999 Participation Rate	Change in Participation Rate (percentage points)		
Everett	895	886	52%	66%	14%		
Triton RSD	988	1027	64%	71%	7%		
Brockton	908	874	60%	66%	6%		
New Bedford	909	933	54%	60%	6%		
East Longmeadow	982	1021	84%	88%	4%		
North Attleborough	1007	1032	77%	79%	2%		
Gardner	1058	1020	58%	59%	1%		
Lexington	1175	1207	97%	96%	-1%		
Woburn	1002	990	74%	73%	-1%		
Cambridge	942	962	78%	76%	-2%		
Milton	1010	1022	91%	89%	-2%		
Braintree	988	1015	87%	82%	-5%		
Lowell	877	911	71%	65%	-6%		
Auburn	963	1010	79%	72%	-7%		
Malden	849	892	65%	58%	-7%		
Worcester	897	904	57%	47%	-10%		
Salem	929	977	71%	57%	-14%		
North Reading	980	1061	86%	62%	-24%		
State Average	996	1009	67%	68%	1%		

# VI. Areas of Concern

The EMAB audits uncovered areas of concern in nearly every school district examined. For example, several districts have not fully implemented individualized contracts for principals. In other districts reporting and accounting errors occurred, sometimes repeatedly. Many of these concerns were relatively simple for the school district to address once discovered by the audit team. The following pages list some of these areas of concern. It is important that other school districts be aware of possible pit falls, and take steps to address management, fiscal and programmatic areas of concern in a timely and effective manner.

# Management

The Education Reform Act removed principals from collective bargaining units in order to give superintendents more leverage in motivating the performance of principals. This new management tool which was given to superintendents to facilitate school-based improvement has not been utilized in many of the audited districts. Superintendents were given the authority to initiate individual contracts with principals that include varying lengths of term, varying pay increases dependent on performance and may include specific and individualized goals in the contract language. Many districts have not implemented any of these reforms and few have taken advantage of all the authority that was granted under Education Reform.

Several audited districts have maintained central control over hiring and have failed to allow principals hiring authority. It is hard to understand how principals are to be held accountable for school performance when they are not permitted to choose their own staff.

In one audited district, the business manager works under a contract issued directly by the school committee and reports organizationally to the committee with a "dotted line" relationship to the school superintendent. This reporting relationship diminishes the authority, flexibility and control of the superintendent's position in handling budgetary and other financial issues.

Several audited districts failed to implement effective staff evaluation procedures. In one district it was evident that the evaluation procedure is not consistently applied. Some evaluation forms were incomplete and lacked key elements, including signatures.

In one audited district, the evaluation procedure for administrators allows for direct participation of the school committee in evaluating both the assistant superintendent and the business manager, and is not in compliance with their duties and responsibilities. In addition, this method is inconsistent with the intent of Education Reform.

The law against smoking on school grounds was not enforced effectively at one high school that was audited. The high school was cited in the 1994 high school accreditation report for laxity in monitoring the halls and enforcing anti-smoking laws

and regulations. The district's effort to curb frequent and pervasive smoking in certain building areas was not effective.

In one audited district, principal contracts include a "just cause" termination clause, which is not in conformance with education reform laws.

Some principals have continued to pay union dues on an individual basis for liability insurance coverage and to have a union representative present during contract discussions.

In one audited district, the administrative contracts do not include termination language.

In one audited district, principals face restrictions in hiring teachers from outside the system. Teachers have a transfer policy written into their contract that allows teachers to declare themselves candidates for transfer. This allows for transfer to another position or to another facility based upon seniority. The contract provision limits principals' ability to hire new teachers from outside the system when openings occur. The contract also incorporates a final evaluation review to be completed by March of each year.

The transfer time frame allows teachers to bid out of positions away from poor evaluation reviews. A teacher's current evaluation status is not carried over to the new position when a transfer is made. This contract provision limits a principal's ability to select teachers and negates the teacher evaluation process.

One audited district maintains an armed special school police force within the school. The eight armed, full time police officers have full powers of arrest. School expenditures for the force cover all areas of police operations including the purchase of Glock 22, 40 caliber handguns with hollow point bullets for ammunition. Although funding was available for the police expenditures, after school programs were not funded.

In one district it is apparent that a well-developed teacher performance evaluation procedure exists, however, the district has not implemented that system.

### **Fiscal**

Enrollment reporting inconsistencies and errors were found in several of the audited districts. In one district, reported enrollment numbers for several fiscal years were incorrect and failed to include over 200 students. In another district different reporting procedures were used from year to year.

One audited district signed two real estate leases without utilizing the bid process, advertising, or the central register listing as required by M.G.L. Ch. 30B, §16. There was no school committee vote or review by the city Chief Financial Officer.

Subsequently, the Inspector General determined the leases to be invalid and new leases were signed utilizing proper procedures.

One audited district has developed at least two separate accounting systems which makes it difficult for the School Committee, the municipality, or any state agency to provide an appropriate level of fiscal oversight.

One audited district does not have a general ledger with balance sheet accounts. From the audit reports issued by the audit firm hired by the district it was evident that the district was not able to reconcile cash received by the treasurer to the books maintained by the business office.

In one audited district, school related capital budget expenditures appropriated in the town budget were not reported correctly in the end-of-year report for several years. Certain unreported expenditures should have been reported as net school spending.

One audited district overstated expenditures on the year end report. The district incorrectly classified purchase requisitions as expended even though purchase orders had not been issued and goods had not been received.

In one district there was a variance between the numbers forwarded to the district by the town finance director and those reported to DOE on the end-of-year report.

In one audited district, expenditures for school related capital budget items appropriated in the town warrant by separate articles were not recorded correctly in the end-of-year reports for several years.

In one audited district, adequate accounting controls were not present as evidenced by a significant budget deficit. The budget was not properly monitored and no review was made of remaining appropriations prior to approval of purchases and contracts. Salary accounts were not monitored. The school department also did not encumber the amount of unpaid teachers' salaries for the months of July and August in the previous fiscal year as required by M.G.L. Ch. 71 §40. The deficit went undetected partially because the School Committee was given accounting data for general expenditures only and not for salaries.

In one district the school committee had not been approving payrolls before the city auditor's office receives them. The Division of Local Services has ruled that even after the passage of education reform, the school committee remains the head of the school department for approving bills and payrolls under M.G.L. Ch.41 §§41 and 56.

In one district personnel can be paid for time in excess of available "leave time" balances, causing a year-end employee pay docking situation (i.e., amounts owed to the district are deducted from employees' final paychecks).

In one district the business office does not utilize an accounting manual. Such a manual should detail procedures to be followed in the payroll and invoice processing and accounting for expenditures. Written methodologies for reporting various types

of revenue and expenditures are required under DOE regulations but there was no evidence of such written methodologies. Such a manual is also important in the event of management turnover in the school district.

In one audited district there is no long-range plan or planning process in place to upgrade the city's infrastructure. Departments submit requests to the Mayor and City Council, who, if requests are approved, fund the project. The Facility Sub-Committee of the School Committee makes recommendations each year.

# **Programmatic**

M.G.L. Ch. 71, §59C mandates that each school has a school council that must develop a school improvement plan. In several districts it is evident that there was little coordination of the planning effort. Mission statements were often vague. School improvement plans did not incorporate guidelines or district-wide goals.

One audited district had no centralized textbook adoption policy and no consistent system wide approval for texts in most subject areas. Textbooks vary at grade level throughout the district. Some texts are over 20 years old and are still in use.

One audited district reached time in learning compliance at the high school by paring minutes out of non-instructional periods, such as lunchtime or class passing time. Although these adjustments brought the district into compliance, there needs to be a commitment to creating meaningful increases in additional student learning time.

# VII. Barriers to Improving Student Achievement

In both conversations with the Education Management Accountability Board and the written responses to the audit, each superintendent identified barriers to improving student achievement in the school district. Superintendents identified many difficulties that they encountered in their districts. There were four common concerns that were noted by several superintendents that will be discussed in this section: special education costs, enrollment increases, the dismissal process and stable and coherent leadership. Through the audit process the Board has identified two additional barriers to student improvement. These barriers are a failure by many districts to implement governance reforms and a lack of coherent data collection on Education Reform spending, and practices by the state.

# Special Education

Several superintendents noted rising special education costs as a barrier to providing the academic program to all students which was desired. As noted earlier in this report, special education costs absorbed a disproportionate amount of the education reform dollars spent. However, there was no clear answer on the remedy. Some superintendents believed that the statutory standard of service as well as the eligibility criteria needed to be amended; others argued that the Commonwealth simply needed to commit more fiscal resources to address the cost pressures.

#### Enrollment Increases

Several superintendents cited keeping up with enrollment increases as a barrier to student improvement. The districts that predominantly cited these issues with enrollment increases are suburban, middle-income communities. They are often the same districts that experienced increases in special education attendance and generally receive less state aid than urban districts. The enrollment increases place stress on both the operational and capital budgets of the school districts. Although this report notes that funding has, overall, kept pace with enrollment the coupling of enrollment increases with special education cost increases (which appears to have affected suburban districts more) and new infrastructure needs creates a great deal of budgetary stress.

#### Dismissal Process

Some superintendents noted the imperfect employee dismissal process as a barrier to student improvement. The current teacher dismissal process makes dismissing an under-performing teacher so difficult and costly that few superintendents attempt to do so.

# Stable and Coherent Leadership

Some districts experienced rapid leadership turnover, incoherent leadership, and long-standing open positions for administrative staff. These districts noted the importance of stable and coherent leadership to improve student performance. In one district, the business manager did not report to or communicate with the superintendent resulting in

a fragmented approach to governance. This governance issue finds its root in the law which requires a fractured governance structure. In a second district the turn-over of superintendents was so frequent that the goals of education reform were generally not addressed over a time frame of several years. Important leadership positions such as director of curriculum were left unfilled for several years in one district resulting in a fragmented approach to curriculum development and implementation.

#### Failure to Implement Governance Reforms

The Education Reform Act removed principals from collective bargaining units in order to give superintendents more leverage in motivating the performance of principals. This new management tool which was given to superintendents to facilitate school-based improvement has not been utilized in many of the audited districts. Superintendents were given the authority to initiate individual contracts with principals that include varying lengths of term, varying pay increases dependent on performance and may include specific and individualized goals in the contract language. Many districts have not implemented any of these reforms and few have taken advantage of all the authority that was granted under Education Reform.

# Lack of Coherent Data

The Education Management Accountability Board was established in 1997 because at that time coherent data on school districts that could be used to make a determination of how Education Reform dollars were being spent and if education was improving in Massachusetts were not available. The Massachusetts Comprehensive Assessment System (MCAS) was not yet being administered and reporting data from districts was incomplete, and in many cases incoherent. Through the audit process the Board determined that coherent data collection continues to be lacking. The MCAS was not initiated until 1998 so limited student improvement data is available. Districts are required to submit biannual reports to the state – the October 1 report and the End of Year report. Through the audit process it became clear that districts reported data in these reports incorrectly and inconsistently, too often failed to report in a timely manner, and filed erroneous information that generally would never be reconciled by the Department of Education. In addition, there continues to be a dearth of useful qualitative analysis, and other basic spending, programmatic and staffing data. For example, based on current data collection it is impossible to know the actual number of certified teachers teaching in a district, versus the total number of certified teachers, some of whom may be in administrative positions. Programmatic spending information such as the total amount spent on Art or Music instruction is not available. Although student/staff ratio data is available, class size data is not. Complete, coherent information is essential for the state to be able to determine not only how money is being spent, but how schools are improving so that information may be shared and useful throughout the state.

# VIII. Qualities of Effective School Systems

Successful organizations tend to exhibit some basic characteristics. Strong and positive leadership with a sense of clear direction that is communicated well though out the organization provides a sense of purpose and drive. Clear communication of goals through mission statements, strategic plans that contain specific goals and objectives to be met and a method of measuring progress and holding managers accountable moves an organization forward. In the case of school districts, it is also clear that sustained efforts to improve the curriculum and align it with the state frameworks improves test scores.

This report has cited a number of indicators of strong management in terms of planning, implementation of plans with indicators of progress and consequences for the failure to achieve goals. The audits also sought to identify communication within the district.

A confidential survey of school district employees was conducted in each district. Survey results of responses given by teachers to selected questions are shown below. It is noteworthy that the districts of Worcester and Everett were given very positive responses to questions related to district management practices.

Teacher Survey Results Teachers responding to survey questions by checking either number "1" or "2", "yes" or "generally yes" to question/statement	Lexington	Braintree	Triton	Salem	Worcester	Malden	Gardner	Lowell	Brockton	New Bedford	N. Reading	Everett	Woburn	Milton	Cambridge	Auburn	N. Attleborough	E. Longmeadow	ALL	ALL	ALL
	1&2	1&2	1&2	1&2	1&2	1&2	1&2	1&2	1&2	1&2	1&2	1&2	1&2	1&2	1&2	1&2	1&2	1&2	MED.	HIGH	LOW
Are the school administration's goals and objectives generally clear and understandable?	75%	83%	72%	70%	92%	36%	62%	67%	73%	79%	66%	86%	74%	84%	74%	86%	80%	75%	74%	92%	36%
Are there indicators issued to measure progress toward goals and objectives generally?	60%	67%	47%	62%	78%	27%	51%	53%	56%	56%	54%	81%	59%	72%	54%	56%	47%	53%	56%	81%	27%
Are there indicators used to measure your progress toward goals and objectives?	69%	74%	72%	57%	87%	36%	55%	52%	56%	57%	66%	85%	69%	75%	60%	76%	48%	63%	64%	87%	36%
Do you believe that your district's curriculum is coherent and sequential?	70%	82%	78%	43%	82%	44%	61%	52%	67%	66%	74%	84%	71%	69%	50%	73%	71%	63%	69%	84%	43%
Is there a coherent, on-going effort within the district to keep curriculum current with evolving trends and best practices in pedagogy and educational research?	87%	82%	88%	79%	85%	45%	72%	69%	72%	69%	91%	91%	75%	85%	63%	84%	78%	75%	78%	91%	45%
Is there adequate on-going communication between teachers and district administrators? In other words, do you think that you know what is going on in the district?	68%	55%	40%	51%	59%	27%	49%	29%	35%	45%	38%	69%	50%	61%	36%	64%	47%	62%	50%	69%	27%
Is there adequate communication between you and your superiors?	78%	81%	59%	65%	79%	46%	58%	64%	71%	69%	58%	76%	68%	73%	65%	83%	68%	71%	69%	83%	46%
Is there a mission statement in place for your school district?	87%	95%	85%	89%	91%	61%	80%	69%	89%	77%	78%	93%	63%	81%	87%	97%	91%	90%	87%	97%	61%
Is there a mission statement in place for your school?	86%	91%	93%	84%	94%	73%	85%	86%	89%	83%	65%	94%	70%	79%	88%	98%	73%	86%	86%	98%	65%
Are these mission statements applied in the operation of the school and the teaching of students?	74%	77%	64%	63%	82%	41%	58%	65%	68%	70%	48%	79%	56%	70%	61%	84%	62%	63%	65%	84%	41%
Do you understand your school budget process?	60%	42%	59%	47%	42%	40%	53%	43%	45%	38%	47%	38%	42%	55%	30%	52%	49%	64%	46%	64%	30%
Percentage of Employees Responding	32%	31%	35%	36%	41%	24%	51%	34%	24%	46%	39%	65%	53%	56%	17%	51%	26%	51%	39%	65%	17%

# VIII. Best & Promising Practices

One of the major benefits of the audits conducted is the discovery of information that can be useful to other school districts. Many school districts use practices that should be hilighted. Below are some of the best practices identified in the audit reports. The practices have been grouped under the broad categories of:

Managing The System
Planning For Success
Effective Teaching
Improving Academic Achievement
Laying The Foundation For Learning, And
Promising Alternatives

#### **MANAGING THE SYSTEM**

### General Management System - Worcester

Objective: To create a management system that emphasizes communication among participants and clearly articulates the goals of the district to all members of the school team.

The management system implemented by the Superintendent is a well-integrated strategic planning system, which translates top level goals into organizational and individual goals. The superintendent uses monitoring and evaluation systems to measure progress and hold staff accountable for performance at all levels. Monthly management meetings include a review of operational statistics for all schools from computer reports provided to all participants. Management addresses significant variance from expected norms and takes follow-up and/or corrective action steps.

#### **Communication and Coordination – Braintree**

Objective: To coordinate cooperative development of system-wide objectives and ensure implementation through communication.

Communication and coordination efforts play a key role in developing and implementing instructional programs. The Superintendent meets three times per year with all school administrators as a group first to develop, review and recommend new system-wide objectives. The school committee reviews and approves these objectives. Principals and curriculum directors must submit a plan to the Superintendent to achieve the goals developed to meet the system-wide objectives. Administrators encourage feedback from staff during the implementation process. The Superintendent monitors implementation through monthly meetings with small groups of administrators.

## **Principals' Contracts - Milton**

Objective: Implementation of Education Reform governance powers to spur accountability and achievement.

Administrators and principals work under individual contracts. Each contract has an attachment containing specific performance goals, standards and evaluation criteria. The Superintendent and principals agree to the goals and criteria annually. The

Superintendent uses written evaluation procedures when evaluation these personnel. Principals have had individual contracts since 1994. Salary increases are tied to annual performance evaluations and in FY98 ranged from zero to five percent.

# **Collective Bargaining Practice - Everett**

Objective: To streamline union negotiations.

The district conducts union negotiations in open, public sessions leading to more meaningful, streamlined negotiations. No negotiations are held in private session.

#### PLANNING FOR SUCCESS

# **School Improvement Planning Process - Worcester**

Objective: To gain the greatest possible benefit from the School Improvement Planning process and school improvement plans.

Worcester uses a well-developed school improvement planning process that includes clear and specific instructions about the type of information needed by council members for the preparation of school improvement plans. The goals and objectives developed in the school improvement plans are measurable so that improvement can be easily quantified. Once the goals are developed, a rolling three-year time frame is allowed for goal achievement. Annual updates on the status of goal achievement are required during this time period.

# **School Improvement Plans - Lowell**

Objective: To gain the greatest possible benefit from the School Improvement Planning process and school improvement plans.

Lowell's school improvement planning process and management oversight are well planned and structured. Directions for developing school improvement plans are clear and require measurable objectives in addition to financial information and plan timetables. Each plan also includes an addendum designed to address test scores in the school and steps that will be taken to improve them. Central administration staff monitors the progress of implementation of the school improvement plans through on-site visits.

# **Technology Planning Process - Lexington**

Objective: To effectively and cooperatively plan for future technology needs.

Lexington uses a comprehensive Technology Plan. Developed by a Technology Task Force Committee, the five year model incorporates long range technology planning. Each year of the plan is focused on a specific goal supported by professional development. This town wide committee has permanent bodies including a Steering Committee, Technology Advisors, a School Liaison Committee and individual school Technology Committees in addition to several ad hoc committees.

#### EFFECTIVE TEACHING

# **Individual Teacher Goal Setting - Worcester**

Objective: To improve teaching through goal setting.

Since September of 1996, teachers have been setting goals and objectives as part of their evaluation process. Each year teachers set goals and objectives consistent with system-wide goals and objectives. The teacher discusses the evaluative criteria, goals, and objectives with the school principal or designee. Monitoring is in the form of announced or unannounced classroom visits. The teacher may request a peer evaluation. A checklist is used to recommend teachers for continual employment, additional classroom observations, appropriate staff development courses, a Resource Team (to improve classroom techniques), or dismissal.

## **Professional Development - Triton**

Objective: To use professional development effectively.

Strong management tools are used in the professional development program. Triton has negotiated a union contract under which principals and the Superintendent may prescribe specific courses to be taken by a teacher to improve his/her competency. Triton has also developed a database to track professional development points earned by teachers to meet recertification requirements and for professional development planning purposes.

# **Teacher Evaluation - Lexington**

Objective: To effectively evaluate teachers and provide appropriate salary increases, remediation, or termination as necessary.

The Lexington teacher evaluation process was designed to give feedback, judge performance level and job status, and ascertain whether teachers are performing up to district standards. Evaluator's recommendations include continued employment with salary increase, continued employment with an improvement plan, withhold the salary increase and termination of employment. A Director of Personnel monitors the evaluators and reviews each evaluation. Since 1994, this effective system has removed thirteen provisional teachers from the system

### **Removing Non-Performing Teachers -Lexington**

Objective: Effective utilization of the dismissal statute.

A 1995 arbitration hearing upheld the dismissal of a permanent teacher under M.G.L., Chapter 71, § 42. This law states, in part, that a teacher shall not be dismissed except for inefficiency, incompetence, incapacity, conduct unbecoming a teacher, insubordination or failure on the part of the teacher to satisfy teacher performance standards developed in the Lexington public schools. The superintendent believes that this was the first time a school system utilized this statute.

# <u>IMPROVING ACADEMIC ACHIEVEMENT</u>

#### **Addressing Academic Weaknesses - Worcester**

Objective: To effectively identify student weaknesses for appropriate remediation.

Worcester has recently developed a Diagnostic Preparation Process to identify student weaknesses in curriculum content and skills. Once identified, instructors teach and reteach targeted content and skill areas until the student achieves mastery. This process

includes training for teachers in giving and scoring open-ended tests, as well as increasing open-ended questions on homework and exams.

# **Teaching Open Ended Questions – North Reading**

Objective: To improve students' ability to understand open-ended questions and provide thoughtful responses.

North Reading has instituted a program designed to teach students how to answer openended questions. Since 1995, a reading consultant has presented weekly open-ended questions to students in grade 8 science, math and social studies classes. An open-ended question is presented which corresponds to the subject matter in the discipline. Students must respond in writing during the class. The teacher evaluates the responses using rubrics and discusses the answers with the students in a following week's class. The classroom teacher also reviews these evaluations. This effort has helped prepare students for the MEAP and the Massachusetts Comprehensive Assessment System (MCAS) tests.

# Addressing test score weaknesses - Lexington

Objective: To effectively identify student weaknesses for appropriate remediation. When one of the Lexington elementary schools had a low 1992 MEAP reading score, additional reading specialists were hired to address the problem. Administrators suggest this was one factor why the 1996 MEAP scores increased for the same school.

# **Targeting Academic Improvement - Worcester**

Objective: To effectively identify student weaknesses for appropriate remediation.

A Cohort Analysis approach is applied to grade 3 Iowa tests to assess students' specific weaknesses. This approach uses pre- and post- tests for the same students over a period of time. Based on the results, specific areas in which students performed poorly are addressed to improve future test scores.

#### **MCAS Action Plan - Everett**

*Objective: To create appropriate MCAS Action Plans for individual schools.* 

The district has an MCAS Action Plan where schools develop individual approaches in preparation for the tests. These include a tutoring program in the high school, teacher plan books that monitor curriculum alignment at the junior high, parenting packets at two elementary schools and a cable television program where principals explain their building action plan. The school committee has a subcommittee on MCAS that meets separately with elementary and secondary principals to discuss MCAS Action Plans.

# **Advanced Reading Program - Gardner**

Objective: To encourage independent reading and improve reading skills.

Gardner uses an ability based reading program called the Accelerated Reader Program in two elementary schools. This program involves evaluating each student's reading level after they take a Standardized Test for Reading Assessment. Students are awarded "Accelerated Reader Points" to use at the student operated store. The program incorporates the state framework requirements for silent reading time.

#### French Immersion Program - Milton

Objective: To promote foreign language fluency and provide multiple opportunities for foreign language study.

Students in the Milton Public School system have three opportunities to begin their study of foreign languages. Students in grade one may enter the French Immersion Program wherein all instruction with the exception of art, music and physical education is taught in French. The second opportunity begins in grade six. Students not enrolled in the French Immersion program may begin to study French, Spanish or Latin. In grade nine, all students may add a second foreign language thus making it possible for all students to take an additional Advanced Placement class in a second foreign language.

## Comprehensive Assessment System - Woburn

Objective: To prepare students for open-ended questions, improve writing skills and identify student weaknesses for remediation.

One of the more successful components of the Woburn curriculum is its Comprehensive Assessment System (WCAS). It prepares students for the MCAS open-ended questions, identifies writing weaknesses, and improves writing skills. WCAS is a yearly writing requirement for all students in grades 2 through 12. Students are required to answer open-ended questions four times a year, one time each in English, mathematics, science and social studies. A completed WCAS assignment involves a brainstorm, a writing organizer, a rough draft and a final paper involving open-ended questions like those that appear on the MEAP and MCAS tests.

#### LAYING THE FOUNDATION FOR LEARNING

#### **Communication of Curriculum - Triton**

Objective: To encourage parental involvement through clear communication of curriculum.

Curriculum development is an ongoing effort at the Triton Regional School District. Curriculum frameworks developed prior to education reform were updated when the Department Of Education issued its statewide guidelines. Triton has prepared a curriculum blueprint and distributed it to all teachers and parents. The blueprint, which is the size of a construction blueprint, has an outline of grades pre-K through twelve and subject areas in a matrix format on its front and back pages. For each grade and subject area, the blueprint indicates the specific subject material is to be covered. The blueprint is an ingenious way to present the entire school curriculum summary in a simple but informative style.

## **Time and Learning - Lexington**

Objective: To increase time and learning.

Under time and learning Lexington added two instructional days to their calendar and introduced structured learning activities linked to the curriculum with goals, outcomes, and an assessment component. Further, Lexington increased the High School graduation requirements, commencing with the class of 2000.

## **Homework Policy - Braintree**

Objective: To communicate a clear homework policy to students and parents to improve adherence to the policy and improve student achievement.

Braintree has a homework policy, which includes objectives, and timeframes for expected homework at the elementary, middle and high school levels. It also includes guidelines for parents, teachers and administrators. The policy has been in use for over a decade and has been revised periodically. Administrators meet during the school year to review student adherence to the policy. Parents are sent a copy of the policy at the beginning of the school year and it is discussed on parent's night and in monthly newsletters. Parental feedback is encouraged by the Superintendent and is used to reinforce the policy.

## **Homework Hot Line Program - Worcester**

*Objective: To continue to help students achieve after the school day is over.* 

Worcester has a dedicated television channel on cable TV, which airs a program entitled "Homework Hot Line" regularly during the school year. Students call teachers in the studio if they have questions on their homework. Teachers then address the subject on the air.

### PROVIDING ALTERNATIVES

#### **Drop-out Prevention Program - Lowell**

Objective: To prevent students from dropping out of school.

Lowell has instituted a dropout prevention and recovery program that includes a partnership with Middlesex Community College in Lowell to provide on-campus counseling and secondary school courses. At the high and middle schools an effort has been made to identify students who are considered likely to drop out. This program attempts to reduce the dropout rate through counseling and by offering alternative school settings in adult education. Lowell's first program in a separate setting has become a charter school in its own right. As a result of these efforts, Lowell's 2.6 percent dropout rate is well below the 3.4 percent state average and significantly lower than the rates of other urban school systems such as Boston (7.2 percent), Brockton (7.3 percent), Lawrence (6.4 percent), and Worcester (7.5 percent).

## Alternative Education Program - New Bedford

Objective: To effectively meet special education and alternative education needs.

New Bedford offers an alternative education program for certain special needs students at one of the district's 28 schools called the Alternative School, West Side Jr./Sr. High School. New Bedford used nearly \$2 million dollars in federal relocation funds to completely remodel a former vocational high school building into an attractive alternative Jr./Sr. High School in the center of the city. This school is a special needs facility that uses a team approach to service at-risk students ages 12-23 from the New Bedford community. Special needs students develop goals that lead to reintegration to the traditional school setting, graduation from West Side Jr./Sr. High School or attainment of a G.E.D.

#### INFORMING AND WORKING WITH THE COMMUNITY

# **Budget Book to All Voters - North Reading**

Objective: To promote the community involvement of a well-informed citizenry.

Annually, the school department issues a budget booklet to every resident of the town which includes a message from the school committee and Superintendent, the district mission, goals for the upcoming fiscal year, budget and prior fiscal year expenditure figures and explanatory notes and charts. The public is encouraged to bring this booklet with them to the annual public hearing of the school department budget.

# **Newspaper Coverage of Schools - Malden**

Objective: To increase public awareness of school change and improvement.

The Malden community has responded in novel ways to the commitment to school-based change. The Malden Evening News carries a special section on school news, and the Malden Daily News publishes the school improvement plans for each school as a means to facilitate public awareness of school change and improvement.

#### **Finance Control Board - Malden**

Objective: To identify and address financial issues before they become larger, more difficult problems.

Following several years of school deficit spending during early 1990s, a group of public officials representing various segments of Malden government began to meet on a regular basis to review the financial status, financial forecasts and other school financial issues. This finance control board serves as an early warning system to identify financial problems early in the year in time to initiate corrective action. The board plays an advisory role and consists of five members: mayor, city controller, school superintendent, city council president, and school committee chairman.

# **Everett Business Education Cooperative - Everett**

Objective: To effectively involve the business community in school development initiatives.

In 1992, the Superintendent brought the community and schools together through the Everett 2000 Committee. The Everett Business/Educational Cooperative (EBEC) is the fundraising arm of this committee. It is comprised of business leaders and community volunteers working to provide financial assistance to the schools. The EBEC holds fundraisers and supplies three series of mini-grants twice a year. The EBEC funds innovative programs that normally could not be funded by the school budget.

## **Development of Community Support – East Longmeadow**

Objective: To effectively involve the business community in school development initiatives.

East Longmeadow has developed a high level of community support and including business partnerships. For example, one company recently donated an engineer to design internet wiring for the school and the community wired the schools internet access.

# OTHER BEST PRACTICES

# **School Construction Program - Lowell**

Objective: The thoughtful, coordinated improvement and modernization of school facilities.

Lowell has undertaken a major school construction and renovation program totaling \$171 million. Even with a 90 percent state reimbursement, there has been a considerable financial commitment by Lowell to improve its school facilities. Upon completion of the \$40 million high school renovation now in progress, Lowell will have built ten new schools and renovated five between September 1991 and September 1997. Many of these facilities now have state of the art equipment and laboratories, especially the libraries, media centers and computer laboratories. The renovation at the high school will provide a television studio as well as meeting and conference facilities for teachers. Especially noteworthy is the foresight to include in the high school renovation ample space for teachers' study and work areas and facilities designed for professional development and training activities.

# **Special Education Program - Braintree**

Objective: To address special education effectively.

Braintree has developed programs for students with substantial learning difficulties that offer to educate students in their home community rather than tuitioning them out to a collaborative or private school setting. These programs provide students with a less restrictive environment, as well as, account for considerable cost-containment.

# **High Expectations Program - Woburn**

Objective: To address special education effectively.

Woburn runs a program at the high school for SPED students with psychiatric needs known as "High Expectations." This program provides special needs students with an education and helps them to develop skills in preparation for future assimilation into mainstream classes or society. High Expectations operates in a structured environment that provides each student with an Individual Education Plan. Students in High Expectations would have to be tuitioned-out of the district if this program did not exist.

## Student Initiated Policy on Tobacco - Braintree

*Objective: To implement effective anti-smoking policies for students.* 

In April 1998, Braintree instituted a strict student policy concerning use or possession of tobacco products. According to the policy, students found smoking or in possession of tobacco products on school grounds are suspended and fined for the first offense. The fine for the first offense may be waived if the student participates in a smoking cessation program run by an accredited school nurse. The suspension time and mandatory dollar fine increases with successive offenses. This school year, there have been only four smoking related offenses reported as compared to over 70 in the last two school years. It is noteworthy that the Braintree's student council made the request for a strong antismoking policy.