

Education Benchmarks
Report #1-02

Student Achievement in Massachusetts: The Lessons of Nine Years of Education Reform



Evaluating and Reporting on
Education Reform in Massachusetts

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Education Benchmarks: A Series of Reports on Education Reform in Massachusetts

This analysis is the first in a series of Education Benchmarks Reports that consider the progress of education reform in Massachusetts. This first report, *Student Achievement in Massachusetts: The Lessons of Nine Years of Education Reform*, considers education improvement in terms of specific student populations, including students enrolled in Special Education, Urban students, Vocational students, and General students..

Future reports will:

- Identify school districts that have made the most progress in boosting the achievement of students enrolled in Special Education;
- Identify districts that have made the greatest achievement gains since the implementation of the statewide annual assessments put in place by the Massachusetts Education Reform Act of 1993; and
- Evaluate the progress of urban and other demographically challenged systems in boosting student achievement.

These reports are (and will be) available at www.edbenchmarks.org. These reports are the work of the author. Any comments should be directed to rgaudet@rcn.com.



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Student Achievement in Massachusetts: The Lessons of Nine Years of Education Reform

As we head towards the second decade of education reform, policymakers and educators have a wealth of information available to help guide the next phase of the school improvement initiative.¹ After four MCAS administrations, the nature of the achievement challenge stands out in stark relief. Students and teachers statewide have made great progress in meeting the demands of a rigorous standards-based curriculum. After nine years of reform efforts, most students in most districts have demonstrated proficiency on MCAS. The Department of Education has reported that, as of Spring 2002 with MCAS retest results included, three out of four Massachusetts students in the class of 2003 have passed MCAS.

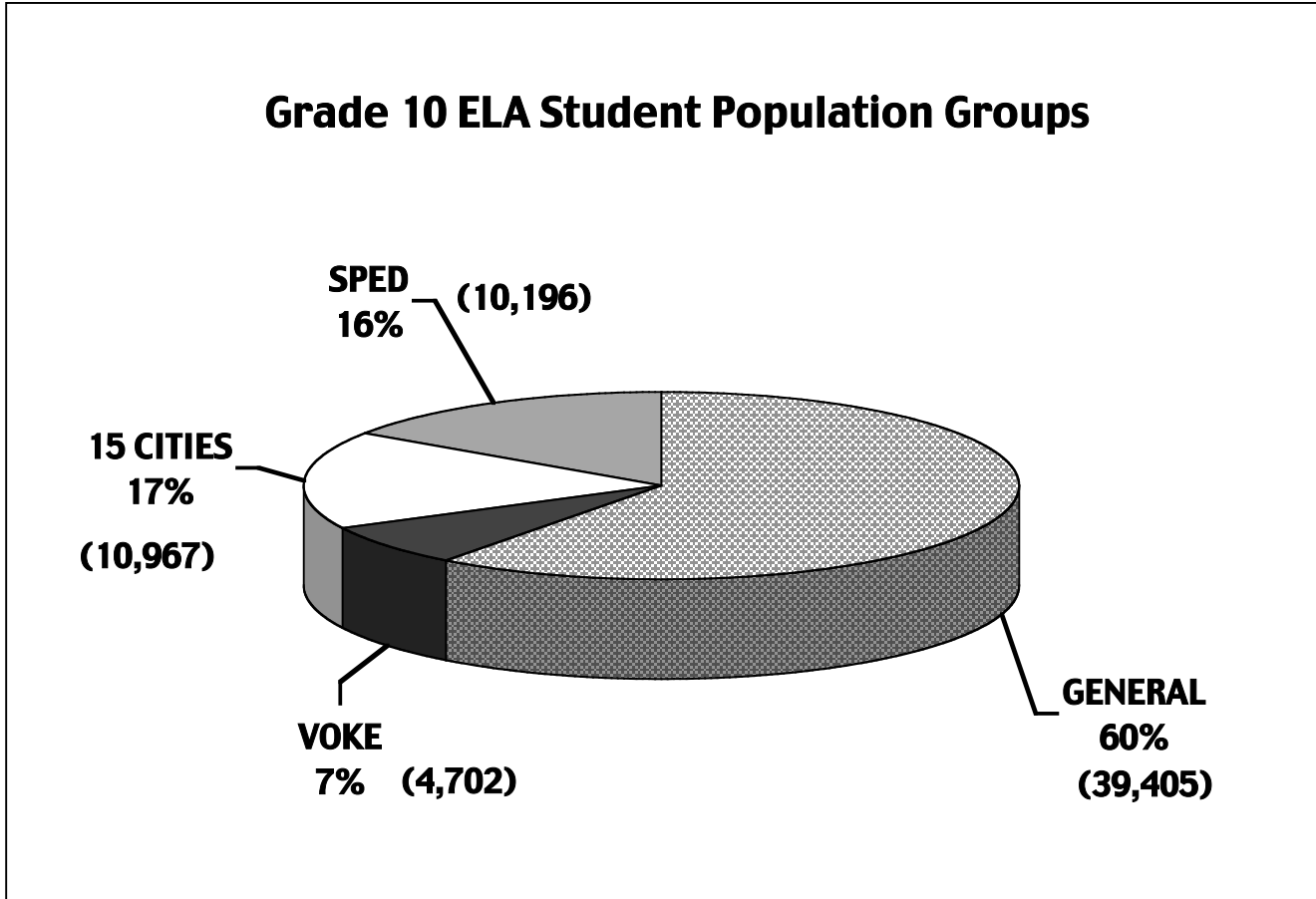
Looking at the overall numbers, however, gives us no information about the specific challenges that face us. While it is encouraging that the MCAS pass rate increased dramatically between 2000 and 2001, there are still many students who have not yet mastered the basic skills needed to live and work in contemporary Massachusetts.

In order to develop a better understanding of what needs to be done to help all students achieve success in school, it is helpful to look at achievement data in terms of student populations. For purposes of this analysis, I will evaluate MCAS progress in terms of four specific populations: General Education students (students who are not Urban; not Special Education; not Vocational); Vocational students (students enrolled in vocational schools excluding Special Education Vocational students); 15 Cities² (students attending school in the 15 major cities, not including Special Education students in those cities and not

¹ This report uses data from the 2000 and 2001 MCAS. It does not include data from the MCAS retest, so the number of students passing MCAS is actually higher than the numbers cited in this report.

² The 15 Cities are the major urban communities at the low end of the state's demography. They include: Boston, Brockton, Chelsea, Chicopee, Fall River, Fitchburg, Holyoke, Lawrence, Lowell, Lynn, New Bedford, Revere, Somerville, Springfield, and Worcester. These communities are home to about 27% of the state's students. The data sources for this material are the 1998 Massachusetts Department of Education District Profiles on the DOE web site.

including students from those cities attending regional vocational schools); and Special Education students (including Special Education students in the 15 Cities and vocational schools as well as in the rest of the state).



Most students in Massachusetts are in the General Student population (60% or 39,405) of Grade 10 students, with the balance being part of the other three groups. Each of these population groups has developed a track record over four years of MCAS, a record that can help shape new school reform policies. Examining MCAS performance in terms of these groups enables us to focus our attention on where the work needs to be done to make sure that all children do learn³.

³ This chart and the data in the following chart uses the Grade 10 ELA MCAS as a source for number of students. The numbers of students taking the ELA and Math MCAS tests are slightly different. The Pass Rates in the charts are for ELA or Math specifically.

Pass Rates of Specific Student Populations, 2001 GR 10 MCAS

	Percent of State	Students	ELA Pass 2001	Math Pass 2001
General	60%	39,405	94%	90%
Vocational	7%	4,702	74%	61%
15 Cities	17%	10,967	71%	62%
Special Education	16%	10,196	47%	39%

It is clear that General students are in good shape in terms of passing MCAS (94% ELA and 90% Math pass rate in 2001). And, although Vocational schools still had a high percentage of their students not passing MCAS in 2001 (26% ELA and 39% Math Fail), this group of students posted the most dramatic score improvement of any student population in Massachusetts. These Vocational students moved up from 46% passing ELA and 31% passing Math in 2000 to 74% and 61% passing in 2001. Vocational educators seem to be reforming their academic offerings so that they will be able to boost more and more students into success.

Urban and Special Education Students

These two student populations pose real challenges to reformers. In 2001, urban students (defined as those who live in the 15 Cities, a category which I use in my research and which is comprised of the 15 major urban municipalities as described in Footnote 2) had Fail rates of 29% in ELA and 38% in Math. Special Education students had Fail rates of 53% in ELA and 61% in Math in 2001. The good news is that both of these groups posted big gains between 2000 and 2001. Students in the 15 Cities improved 18 points in ELA, and in Special Education improved 19 points in ELA. Students in the 15 Cities improved 22 points in

Math, and Special Education students improved 18 points in Math. Despite these gains, there clearly is much work to do in promoting high achievement for all.

Thus, as we move towards implementation of standards-based graduation requirements for the class of 2003, we know where work needs to be done. There is no general achievement problem in Massachusetts; there are challenges unique to specific student populations.

Achievement and Specific Student Populations

We know that there was a 20-point improvement in the pass rate for Math and a 14-point improvement in the pass rate for ELA between 2000 and 2001 statewide. Examining the rate of improvement among specific populations is important to understanding how education reform has enhanced student achievement in the Commonwealth.

GR10 MCAS Pass Rate Change by Student Population, 2000 – 2001
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	ELA Pass 2000	ELA Pass 2001	Point Gain
General	80%	94%	14
Vocational	46%	74%	28
15 Cities	53%	71%	18
Spec Ed	28%	47%	19

	Math Pass 2000	Math Pass 2001	Point Gain
General	69%	90%	21
Vocational	31%	61%	30
15 Cities	40%	62%	22
Spec Ed	21%	39%	18

- **General Education students** are in good shape concerning passing MCAS. If a student is not enrolled in Special Education programs, or not attending a vocational school, or not going to a school in a major city, he or she is very likely to have already demonstrated basic skills competence on MCAS (pass rates of 94% and 90% in ELA and Math in 2001).
- **Vocational Education students** made solid progress in boosting achievement between 2000 and 2001. As you can see from the charts above, vocational students boosted passing performance by 28 points in ELA and 30 points in Math. This is astounding progress. If Vocational students and educators continue to show robust improvement in performance, then this student population will be able to meet the demands of a standards-based reform initiative.
- **Students in the 15 Cities** had 29% ELA and 38% Math Fail rates in 2001. The good news is that the Fail rates last year were much lower than in previous years, but there clearly is much work to be done to help urban schools better meet the learning needs of their students.
- **Special Education students** made solid gains on MCAS between 2000 and 2001, but still over half of these students did not pass MCAS last year (53% ELA and 61% Math Fail rates in 2001). As is the case in urban schools, there is much work left to do to give Special Education students the basic skills they need in life.

Boosting Achievement in Urban and Special Education Populations

My previous work has focused on the role local demography plays in student achievement in Massachusetts. It has become common knowledge that test scores track demography to an almost disturbing degree. (See *Effective School Districts in Massachusetts: A Study of School Performance Relative to District Demography*, March 2002, available at www.edbenchmarks.org.) While it is important to understand the role of community characteristics – demography – on student achievement, it is also critical to be able to identify where our reform energies must be focused in order to broaden the roster of those who have achieved educational success by mastering basic skills

As the first decade of the current education reform initiative winds down, we know where we need to focus our reform energies: in the cities and on Special Education students. While before MCAS some observers realized that learning was not an equal opportunity concept in Massachusetts, MCAS has given us a vivid – even stark – picture of educational effectiveness in the Commonwealth. Now we know where schools have not been effective in helping all students learn.

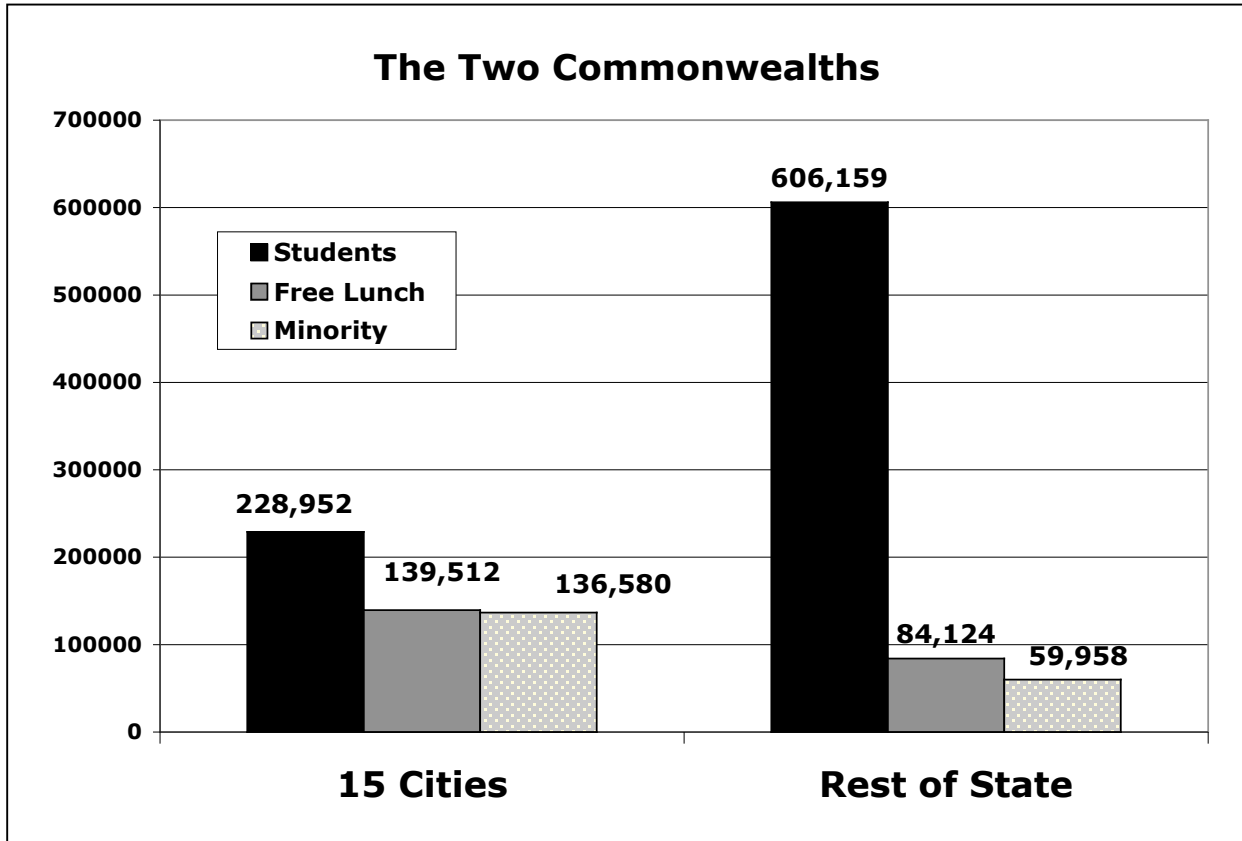
This information should not be seen as being critical of those who teach our children. Historically, educators have had remarkably little ability to change curriculum and pedagogy to better meet the needs of their students. Schools of education, textbook publishers, education-oriented non-profits, and teachers unions relied on a one-size-fits-all approach to teaching and learning. All across the nation, we are coming to realize that teaching must be customized to meet the very diverse needs of contemporary classrooms. In Massachusetts, we know where education is working and where it needs to be modified. Our next task is to make urban schools and Special Education programs more effective at meeting the learning needs of students and professional needs of teachers.

Beyond the Percentages: The Challenge of Providing Effective Education in Urban Districts

In Massachusetts, most of our minority students and most of our poor students attend school in one of the 15 Cities, a group of urban communities at the lower end of the state's demography. The challenges of eliminating the achievement gap among races and of addressing the problems of socio-economic disadvantage merge in our urban centers.

The 15 Cities, which educate 27% of the state's student population⁴, are home to 70% of the state's minority population and 62% of students eligible for Free/Reduced Lunch under federal guidelines, a measure of poverty.

⁴ In this report the 15 Cities account for only 17% of the sample population, not the 27% that is the statewide figure. This is because of several factors, chief among which is the fact that I pull out Special Education students from the 15 Cities, thus substantially reducing the population;



The defining characteristic of cities is that they are where less advantaged people live in Massachusetts.

- New immigrants and the less well-off do not settle in Weston and Wellesley; they come to Boston and Worcester;
- Students in cities tend to be less prepared for school than students in suburbs;
- Many parents in our cities have not experienced the educational success that middle- and upper-middle class citizens have so they may not be as effective in helping their children succeed in school. If there is a problem with a teacher or a program in Newton or Lincoln, it is dealt with quickly by concerned parents. That is not always the case in the cities;
- People who do not speak English as a primary language live in the cities. Not being facile in English is a huge barrier to success in school, whether or not the student is actually identified as LEP (Limited English Proficient);

another factor is that dropouts reduce the number of students taking the Grade 10 MCAS compared to the Grades 4 or 8 MCAS.

- Most urban parents do not have the resources to make up for any learning problems of their kids. Most city parents simply do not have the money to pay for Sylvan Learning Centers and private tutors for their kids at \$30 to \$50 an hour;
- Two-thirds of minority students in Massachusetts attend school in the 15 Cities. If we are to narrow the minority achievement gap, we must focus on improving the educational effectiveness of those systems that educate our minority youth.

Thus, city schools must do more for their students than most suburban systems to ensure success in learning for all. Urban schools must be able to deliver more robust services to students and may have to provide more teaching time to be effective.

Specific Urban Challenges

There are also several specific impediments to learning that may be faced by urban high school students.

- There is evidence that some students now in high school were **socially promoted over the years**, passed on to the next grade without having mastered grade-level material. To their credit, urban systems currently have policies of not socially promoting, but in many cases these are fairly recent pronouncements.

One indication of the prevalence of social promotion in cities is what is known as the Low Fail rate. This is the lowest rung in the Fail category on MCAS achievement. There are five levels in each of the four MCAS performance categories (Advanced; Proficient; Needs Improvement; and Fail). The lowest level is Low Fail, identified as PCT20 on the state's micro-data disks. Students scoring at this level are very far away from success on MCAS.

While it is not possible to prove definitively that many students who score at this very low level have been socially promoted, it is a logical assumption. A student who had no mastery of basic skills through elementary and middle school, yet had been routinely promoted, would likely score at the Low Fail level. Students who are at this level have very little chance of catching up with the traditional high school curriculum. It will take intense and focused learning assessment and tutoring to boost these young people up to success.

- On the 2000 MCAS (the last year for which the micro-data is generally available), the Fail rate for students in the 15 Cities was 53% for ELA and 40% in Math. What is more troubling to careful observers is that 30 points of the 53% ELA Fail rate and 39 points of the 60% Math Fail rate represented students scoring at Low Fail. This means that well over half of the failing students performed at the lowest level recorded on the test. It would be very difficult for students scoring at the lowest level of MCAS to improve performance enough to pass while still in high school.

We do not have the micro-data on the percentage of students in Low Fail in 2001; the trend line is towards lower rates of Low Fail in the cities over time, but it is likely that in the 2001 and in the 2002 MCAS assessment cycles, thousands of students would still score in Low Fail. Many of these students were educated in pre-MCAS classrooms where seat time, not actual learning, was the criterion for promotion. Social promotion practices of the past cast a long shadow that reaches into the present and clouds some students' chances for success in a world of standards-based curriculum. Eliminating social promotion will eventually level the playing field between those urban students who historically had been moved ahead to the next grade as a matter of routine and students in districts where promotion was consistently based on achievement. But for now, social promotion may make it more difficult to boost some urban students up to success.

- **Math achievement** poses a particular challenge. Urban students are much further away from success in Math MCAS than in ELA. While the general policy of social promotion likely is an issue here, other factors may be at work.

A recent article in *Commonwealth*, the journal of Mass Inc (a non-profit public policy research organization), documented the frustrations of teachers and students in a Boston high school math classroom. After several weeks in the classroom, John DiPaolo, a tenth grade math teacher at Brighton High in the 2000 -2001 school year, wrote:

“It was pretty clear that many students weren’t learning anything at all. I began to see that some had never grasped the most basic concepts of math. They apparently had not been learning math for years.”

John K. DiPaolo, “Are schools all about instruction? Not yet,” in *Commonwealth*, Special Issue 2002 (March), pp. 20-22, available at www.MassInc.org

It may be that social promotion in early grades meant that students would not have mastered the math basics. It may be that urban classroom teachers are less prepared to teach math. In an upscale suburb where home values are directly connected to the perceived quality of public school, it is unlikely that an improperly prepared math teacher could be teaching math. Parents simply would not put up with it. That level of parental involvement, oversight, and vigilance may not be present in urban settings.

- **A final problem facing urban educators is attitude** – the attitude of some young people that school just is not important enough to take seriously. A recent survey done by Mass Insight (a Boston-based non-profit organization advocating education reform), found that urban students knew why they were having trouble on MCAS. The students, by strong majorities, reported their “lack of effort and poor attendance most prominently as reasons for not passing. “ Indeed, most students thought that they could pass if they put in more effort. (See *Taking Charge: Urban High School Students Speak Out About*

MCAS, Academics, and Extra-Help Programs, p. 4, from Mass Insight, Boston, at www.masinsight.org)

Half of the Boston students who failed MCAS twice are chronic truants. It is no surprise that those who choose not to go to school will not do well in demonstrating mastery of what is taught in school. (*Boston Herald*, April 28, 2002, p. 260)

Some urban education officials have noted that, even when extra help is available, many students choose not to avail themselves of the assistance. Students in academic difficulty who continue to do the same things the same way that led to their learning deficits will continue to fail to learn, despite the best efforts of their teachers.

The prescription for success for urban students is schools that are built to deliver more educational services and content over a longer period of time than has been the norm in our Kindergarten through Grade 12 system. Students in disadvantaged settings simply need more to succeed in school – more time to learn, more individualized attention, and more resources for teachers than do children from more advantaged situations. Urban schools need to be reconfigured for success in order to be successful.

The Challenges of Providing Effective Special Education

Special Education students comprise 16% of the state's student population. This group showed strong improvement in Grade 10 pass rates between 2000 and 2001 (ELA up from 28% to 47%; Math pass rate up from 21% to 39%); but, at day's end, over half of Massachusetts' Special Education students did not pass in 2001. The results of the 2002 MCAS should give us a good indication of how well prepared our Special Education students are to meet high standards. If we continue to see dramatic improvement, then current policies may be adequate to move these children up to high achievement levels. If not, then we need to rethink our approach to providing services to Special Education students. If a

solid majority of Special Education students continue to not demonstrate mastery of basic skills, we are doing no one any favors by blaming the test and arguing to give some children a pass on having to learn how to read, write, and do basic math.

Of particular concern is the population of Special Education students who happen to attend school in the 15 cities. Their rate of improvement between the 2000 and 2001 MCAS was less than that of Special Education students statewide. The good news is that urban special education students went from single-digit pass rates to double-digit pass rates. What is of more concern is that, even after a good bounce in the percentage of students passing MCAS between 2000 and 2001, less than 20% of Special Education students in the 15 Cities passed MCAS in 2001.

**Rates of Improvement of Special Education Students:
Statewide and in the 15 Cities**

	2000 Pass Rate	2001 Pass Rate	Point Gain
Statewide Special Education ELA	28%	47%	19
Statewide Special Education Math	21%	39%	18
15 Cities Special Education ELA	8%	18%	10
15 Cities Special Education Math	5%	12%	7

If we do believe that all children can learn, then much more work needs to be done to align Special Education programming with the demands of a standards-based reform package. Special Education students should be given the accommodations they need to participate in MCAS. Beyond that, tutoring programs that focus on the individual needs of specific Special Education populations should be developed with the MCAS remediation money that is available from the state. Tutors, including non-teacher professionals with specialized training, should develop programs that directly meet the needs of Special Education students in Massachusetts. While mainstreaming and inclusion are good concepts, more is needed to help all children learn.

It is critical to move beyond deferring to process and move towards aggressively seeking progress. A recent commentary by Kalman Hettleman in *Education Week* pointed out that in Maryland the focus of special education resources was on making sure that parents were notified of hearings; completing evaluations on time; and implementing programmatic education plans on time. This sounds good, but the author wryly noted that special education students in Maryland “aren’t coming close to achieving their academic potential.” Massachusetts’ education partisans would take umbrage at comparing the Bay State to Maryland, but a solid majority of our special education students cannot demonstrate mastery of the basics measured by MCAS. That makes us like Maryland in at least one critical area. Mr. Hettleman observes that “the burning issue is no longer access. It’s how to provide these students with high-quality instruction and other services they need to achieve academic success.” While we congratulate special education advocates for their success in achieving more access to services for more students, MCAS has demonstrated that access is not enough to ensure success. (See Kalman R. Hettleman, “Still Fighting the Last War.” *Education Week*, April 17, 2002, p. 36.)

End Note

There may never have been a time when education reform was more needed in Massachusetts.

- Reports routinely chronicle the growing gap between the haves and the have-nots in Massachusetts. Work done for MassInc has documented the rise of income inequality in Massachusetts. “Income inequality has increased in Massachusetts over the past two decades and income inequality here is greater than anywhere else in the nation.” (See “The Rise in Income Inequality in Massachusetts and New England,” by Andrew Sum and Neeta Fogg with Mykhaylo Trub’skyy and Sheila Palma, MassInc, Boston; The American Dream Project, Policy Brief #2, August 2001. p, 2). Young people who leave school without basic skills will not find rewarding employment and will continue to contribute to the growing income gap.
- Employers and college professors continue to report that they are dissatisfied with the basic skills of young people. Public Agenda, a national survey organization, reports that almost three-quarters of those interviewed were not happy with the writing skills, grammar and spelling, and organizational skills of recent high school graduates. (See Special Report, “Public Agenda Reality Check 2002,” *Education Week*, March 6, 2002, p. S7.)
- Business support for MCAS remains very strong. It may be time for Massachusetts’ commercial interests to become more involved in making sure that new policies work to boost achievement where it is weak. It also may be time for Massachusetts business to step up to the plate and develop support organizations to help with data reporting and dissemination, areas that need to be strengthened if Massachusetts is to be able to participate fully in the new funding made available under the recently reauthorized Elementary and Secondary Education Act.

It is apparent that public education in Massachusetts is fundamentally strong. Most schools in most places work well for most students. It is also apparent that the programs, policies and services currently provided to Urban and Special Education students need to be enhanced and focused in order to boost the achievement of students who are at-risk academically. Two-thirds of all the students in Massachusetts who did not pass MCAS in 2001 attend school in the 15 Cities or are in Special Education. That is where education reform needs to be strengthened.

The choice is ours. Fix the problems in teaching Urban and Special Education populations and ensure learning for all, or leave the *status quo* in place and continue to support an educational system that works for most of us but not for all of us.

Appendix I: MCAS GR 10 Results by Student Population

