Massachusetts has reason to be proud of its record since landmark education reform legislation was passed in 1993. The state scores first in the nation in 4th and 8th grade English and math on NAEP, the “Nation’s Report Card.” On international assessments, Massachusetts students lead their peers in western nations; but continue to trail Asian counterparts.

Where do we go from here?
This annual report focuses on the public school performance that ultimately matters most. If our students don’t fare well academically when they reach high school and succeed after graduation, we have ultimately failed them.

In this first year of the report, we spotlight the Achilles heel of Massachusetts education: the persistent achievement gaps among low-income and minority students. When it comes to closing these gaps, Massachusetts lags behind many other states. One statistic tells the story.

In 2008, there were only 65 qualifying scores in Massachusetts public high schools by African American students on Advanced Placement science exams.7

It doesn’t have to be that way.
In the 2008-09 academic year, 10 Massachusetts high schools used AP math, science and English as “game changers” for high poverty and minority students. Another 12 high schools have joined them this year, with nearly 30 more expected to launch the program in 2010-11. Details on the Massachusetts Math and Science Initiative (MMSI) are inside the Report.

Focusing on high school achievement gaps, this Report is framed around goals set by Mass Insight’s 2004 Great Schools Campaign. That agenda is focused on two themes:

- Excellence: especially in math and science;
- No Excuses: Turnaround of 100 failing Massachusetts schools, the bottom 5% in the state.

The time has finally arrived. Offering $4.35 billion in Race to the Top funds, the federal government is holding out a competitive carrot of up to $500 million each to a limited number of states that meet bold and specific challenges set by Secretary of Education Arne Duncan. Less well known, but equally important is that $3.5 billion of Title I School Improvement funds are being targeted to turn around the bottom 5% of schools nationally. This goal was set by Mass Insight in its 2007 national Turnaround Challenge report and has been officially adopted by President Obama. Massachusetts will receive at least $75 million in school improvement funds over the next three years.

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**Federal Funding and State Legislation**

### Federal Funding Raises the Bar³

**RACE TO THE TOP**

Competitive federal funds, receipt of which is based on meeting the following Four Assurances and one priority:

- High quality, aligned standards
- Data systems to track student performance and teacher effectiveness
- Provision and equitable distribution of effective teachers
- School turnaround
- Priority: STEM

Funds may only go to 10 or 15 states.

**1003(g)**

For Title I School Improvement: at least $75M in national funding to be distributed in Massachusetts over 3 years

Draft required options for school turnaround:

- Close school and disperse students
- Hire a charter operator
- Replace principal and up to 50% of staff
- Employ another transformational model with significant requirements attached

### State Turnaround Legislation Required to Compete for Federal Funds

Governor Patrick proposes two-pronged legislation to create innovative school choices for students and teachers and close minority and low-income achievement gaps. Specifically, the Governor’s bills would:

- Raise the state charter school cap to double the number of charter school seats in the worst performing districts
- Create in-district Readiness Acceleration Schools to address the key inhibitors to student achievement. Acceleration Schools would modify existing district and union rules, enhance curriculum and instructional tools and provide additional supports, such as expanded learning time
- Position the state to better compete for federal Race to the Top funds which would bring up to $500 million to Massachusetts

Boston Mayor Thomas Menino has also filed important legislation to provide school superintendents with expanded powers to turn around the lowest performing schools, including the use of in-district charters.
### INTRODUCTION

**A Group of Massachusetts Schools Begin to Close the Gaps and Prepare Students for College**

**Honor Roll: Five MMSI Schools Rank Top in State for Increased Minority AP Success**

<table>
<thead>
<tr>
<th>School</th>
<th>2008</th>
<th>2009</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>John D. O’Bryant School, Boston</td>
<td>40</td>
<td>64</td>
<td>1</td>
</tr>
<tr>
<td>Malden High School</td>
<td>7</td>
<td>21</td>
<td>2</td>
</tr>
<tr>
<td>Springfield Central High School</td>
<td>9</td>
<td>19</td>
<td>4</td>
</tr>
<tr>
<td>Northampton High School</td>
<td>3</td>
<td>12</td>
<td>6</td>
</tr>
<tr>
<td>Chelsea High School</td>
<td>7</td>
<td>15</td>
<td>7</td>
</tr>
</tbody>
</table>

Increase in AP exam scores of 3 or greater for minority students in math, science and English.

### What is MMSI?

Mass Insight’s Massachusetts Math and Science Initiative (MMSI) is funded by a $13.2 million grant from the National Math & Science Initiative (NMSI), which selected Massachusetts as one of six states for the first phase of its program. Now working in 21 high schools throughout the state, MMSI is Massachusetts’ largest statewide high school math and science program and is also the largest statewide teacher training and support program.

### The Excellence Agenda

Although some Massachusetts schools struggle to close achievement gaps and ready students for success in college, others have become exemplars for increasing AP participation and performance, especially for minority and low-income students. These schools have adopted the Excellence Agenda, through the implementation of the AP Training and Award Program. In 2008-09, five MMSI schools ranked in the top 10 in the state for increasing AP qualifying scores for African American and Hispanic students. With only 7 percent of the African American and Hispanic enrollment in the state, the 10 MMSI schools accounted for 52% of the state’s increase in qualifying scores for this population in 2009, highlighting the potential impact of this program statewide.
But Too Many Struggling Schools Have Made No Progress Over Time, Despite Repeated Interventions

Massachusetts Schools Not Making AYP

![Bar Chart showing the number of schools in corrective action and restructuring from 2003 to 2009.](chart)

**What is School Turnaround?**

Turnaround is a dramatic and comprehensive intervention in a low-performing school that

a) produces significant gains in achievement within two years; and

b) readies the school for the longer process of transformation into a high-performance organization.

*The Turnaround Challenge*, Mass Insight, 2007

**No Excuses for Failure**

The number of schools in corrective action and restructuring in Massachusetts, including high schools, has continued to increase every year since 2003. In schools that fail to make Adequate Yearly Progress year after year, achievement gaps persist and students struggle to graduate from high school while receiving no real preparation for college. These schools are in dire need of turnaround. For real school turnaround to occur, deep intervention and comprehensive reform is required—reform that includes an Excellence Agenda with access to rigorous college preparatory courses for all students.
**INTRODUCTION**

In Struggling High Schools, Fewer Than 20% of Students Are Proficient

Student 2008 MCAS Performance in Schools Identified for Restructuring

The majority of schools, including high schools, not making AYP in 2009 are located in 10 districts: Boston, Brockton, Fall River, Holyoke, Lawrence, Lowell, Lynn, New Bedford, Springfield, and Worcester.

---

**Boston’s Challenge**

Dropouts and delayed graduation continue to challenge urban schools. Only 40% of Boston high school students graduate within four years, based on a recent Boston Foundation analysis of the Class of 2007.

College success is a reality for few students in Boston. Less than 15% of 9th graders can expect to earn a Bachelors or Associates Degree.

---

No Excuses for Failure

Despite years of “light touch” interventions by the state, many schools have failed to make meaningful progress when it comes to student achievement. Although it is important to point out that low student performance is a problem in some other districts statewide, the vast majority of schools in Massachusetts identified for restructuring are located in 10 district, labeled “Commissioner’s Districts” by the state.

Schools such as those in the Commissioner’s Districts struggle not only to help students pass the Massachusetts Comprehensive Assessment System, but also to keep students in school and send them on to college. Low test scores, high drop out rates, and a lack of college readiness programs plague these schools.

Boston’s Challenges, highlighted here, reflect similar student outcomes in all ten Commissioner’s Districts, underscoring the urgent need for new state and district powers and targeted investment of the new federal funds to turn around the lowest performing schools.
Massachusetts Overall Lags the Nation in AP Participation and Performance for Minorities

AP Qualifying Scores for African American and Hispanic Students

The Excellence Agenda: Where Are We?

In general, Massachusetts schools lag the nation in providing college readiness programs for minorities and for low-income students. Access to AP, the most widely used college readiness program in the state, and other programs, such as International Baccalaureate (IB), remains a privilege reserved for the middle class. When disaggregated, the data on AP participation in Massachusetts show that minority and low-income students rarely enter AP or similar programs or sit for AP exams. Without access to college readiness programming, how can we prepare these students for success in college?

But, some schools in Dallas and Massachusetts are beating the odds. The “Dallas 10” were the first ten schools in the nation to implement the Advanced Placement Training and Incentive Program, which is the Texas initiative that serves as the model for the Massachusetts Program. Those ten schools, along with the first MMSI cohort of ten, have dramatically increased minority access to and success in AP.

Massachusetts Is Not a U.S. News High School Leader

<table>
<thead>
<tr>
<th>Rank</th>
<th>School/City</th>
</tr>
</thead>
<tbody>
<tr>
<td>27.</td>
<td>Boston Latin, Boston, MA</td>
</tr>
<tr>
<td>100.</td>
<td>Belmont High, Belmont, MA</td>
</tr>
</tbody>
</table>

*Top 100 on the U.S. News Best High Schools List

U.S. News & World Report America’s Best High Schools methodology is based in part on Advanced Placement participation and performance. Jay Mathews Newsweek Challenge Index provides another national ranking, but has been criticized for failing to account for success on a full range of achievement gap measures.
One Innovative Program Increases AP Access and Performance for Underserved Students

The Excellence Agenda: Where Do We Need to Be?

Not only do MMSI schools increase access for students, they boost student performance on AP examinations. The ten schools that were a part of the first MMSI cohort dramatically increased AP performance for all students, including minorities and low-income students. Using a proven approach described in the following pages, MMSI helped students in participating schools achieve scores of 3 or greater (qualifying scores, according to the College Board) on examinations of AP math, science, and English. The success of MMSI in these schools is proof that an Excellence Agenda works.
The Excellence Agenda: How Do We Get There?

MMSI’s exemplar schools could not have achieved success without the comprehensive strategy that the program brings. By providing teacher training, student tutoring and support and awards for teachers and students and by entering into a contractual agreement with every school district that it enters, MMSI’s approach to the Excellence Agenda is providing an increasing number of students with the tools to succeed in college. The program is about pulling multiple levers simultaneously, not a “silver bullet” approach—similar but less comprehensive strategies have been used elsewhere and have failed to produce the same kind of dramatic change. For MMSI to scale up, major support, both from the state and federal governments and from private sources, is necessary.

Key Program Elements, MMSI

1. Increase Participation:
   Greater student participation in mathematics, science and English AP courses. Add 26 schools in 2010/11 and be in 90 schools by 2013

2. Increase Performance:
   More qualifying scores (3/4/5) on AP examinations

3. Increase College Success:
   More students matriculating to and graduating from college

MMSI Goals

The Key to MMSI’s Success Is a Comprehensive Emphasis on Students, Teachers and Schools
Just as MMSI schools have to set goals to help benchmark their improvement, the state of Massachusetts needs to set its own goals for getting all students on the path to college readiness. Guided by federal and state policy environments that encourage college ready standards and, especially, a focus on Science, Technology, Engineering and Mathematics (STEM), the state should set its sights on increasing AP participation and qualifying scores both overall and for underserved populations of students. The three goals outlined above are only the beginning. They provide a starting point for thinking about how every Massachusetts school can be world class and every Massachusetts student can be college ready. They should also be considered important goals for schools in need of dramatic turnaround.

Some struggling high schools have already seen the benefits that the Excellence Agenda can offer. Fall River Durfee High School, which has been identified by the state for restructuring, is taking an approach to turnaround that includes the Excellence Agenda—Durfee has joined MMSI’s new cohort program.
Multiple State and District Interventions Have Not Led to Turnaround

Two High Schools Tell the Story

<table>
<thead>
<tr>
<th>The English High, Boston, Adequate Yearly Progress History</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELA (aggregate)</td>
</tr>
<tr>
<td>ELA (all subgroups)</td>
</tr>
<tr>
<td>Math (aggregate)</td>
</tr>
<tr>
<td>Math (all subgroups)</td>
</tr>
</tbody>
</table>

Dean Technical High School, Holyoke, Adequate Yearly Progress History

| ELA (aggregate)                                          | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | % Below Proficient, 2009 MCAS, Grade 10 |
|-----------------------------------------------------------|
| ELA (all subgroups)                                      | No   | No   | No   | No   | No   | No   | 77%                                      |
| Math (aggregate)                                         | No   | No   | No   | Yes  | No   | No   | 84%                                      |
| Math (all subgroups)                                     | No   | No   | No   | No   | No   | No   |                                          |

Genuine Transformation vs. Incremental Change

<table>
<thead>
<tr>
<th>Four Key Indicators</th>
<th>High-Performing/High-Poverty High School Benchmark*</th>
<th>MA Interventions in Chronically Underperforming Schools</th>
<th>MA Commonwealth Pilot Schools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time</td>
<td>Two more hours each day, summer institute for entering students</td>
<td>No extra time</td>
<td>One more hour in two of four schools (through other funding sources)</td>
</tr>
<tr>
<td>Flexibility</td>
<td>Charter-like autonomy</td>
<td>No real change in operating conditions</td>
<td>Present in agreement—but only partially in practice</td>
</tr>
<tr>
<td>Funding</td>
<td>Teachers paid 19% more</td>
<td>1–2 extra staff per school</td>
<td>$30–50K per school</td>
</tr>
<tr>
<td>Partner Capacity</td>
<td>Clark: deeply embedded university partner</td>
<td>America’s Choice and NISL: curriculum and training support</td>
<td>CCE: at least 100 days per school of coaching support</td>
</tr>
</tbody>
</table>

No Excuses for Failure: Where Are We?

Since the advent of Education Reform in Massachusetts, the state has intervened repeatedly in the lowest performing high schools. Such interventions, which have included additional funding, curriculum “partners”, and even expanded learning time have, however, failed to produce meaningful change.

The English High School in Jamaica Plain, for example, has been identified for major reform. Designated a “Commonwealth Pilot School”, English was split into two small schools, an intervention meant to facilitate school improvement. Even the state’s deepest interventions, such as those implemented at English, have taken too “light touch” an approach that does too little to bring about comprehensive change.
Some High Performing/High Poverty Schools
Provide Models for Change

HPHP Readiness Model

- **Safety, Discipline & Engagement**
  Students feel secure and inspired to learn
- **Action against Adversity**
  Schools directly address their students’ poverty-driven deficits
- **Close Student-Adult Relationships**
  Students have positive and enduring mentor/teacher relationships

- **Readiness to ACT**
- **Readiness to LEARN**
- **Readiness to TEACH**

- **Shared Responsibility for Achievement**
  Staff feel deep accountability and a missionary zeal for student achievement
- **Personalization of Instruction**
  Individualized teaching based on diagnostic assessment and adjustable time on task
- **Professional Teaching Culture**
  Continuous improvement through collaboration and job-embedded learning
- **Resource Authority**
  School leaders can make mission-driven decisions regarding people, time, money and program
- **Resource Ingenuity**
  Leaders are adept at securing additional resources and leveraging partner relationships
- **Agility in the Face of Turbulence**
  Leaders, teachers and systems are flexible and inventive in responding to constant unrest

The Turnaround Challenge, Mass Insight, 2007

**Two High Poverty Schools in Massachusetts Set the Standard for Academic Achievement**

<table>
<thead>
<tr>
<th>University Park Campus School, Worcester</th>
<th>MATCH Charter Public School, Boston</th>
</tr>
</thead>
<tbody>
<tr>
<td>Founded on a partnership between Clark University and the City of Worcester</td>
<td>A public charter school serving 220 students in grades 9-12</td>
</tr>
<tr>
<td>All students pursue a college preparatory curriculum</td>
<td>In 2009 students ranked 1st in the state on math MCAS</td>
</tr>
<tr>
<td>The vast majority of students attend college</td>
<td>99% of the first five graduating classes have been accepted into four-year colleges</td>
</tr>
</tbody>
</table>

**No Excuses for Failure: Where Do We Need to Be?**

High poverty/high performing schools provide a model for turning struggling schools around. Though not all high poverty/high performing schools are charters, many of these schools use charter-like approaches in order to produce meaningful change. They operate with sufficient funding, significantly increase the school day, provide leaders the flexibility to make mission-driven decisions and ensure that sufficient leadership and partnering support exists. In brief, these schools change the rules and incentives governing people, time, money and programs and build upon both internal and external human resources to create an effective learning environment for students. To effect school turnaround on a large scale in Massachusetts, the HPHP readiness model needs to be embedded within entire systems.
No Excuses for Failure: How Do We Get There?

With encouragement from the state and federal governments, it is now time to move beyond the “silver bullet” strategies of the past. A comprehensive framework provides the flexibility to implement real changes:

1) create turnaround zones that focus on failing schools, and

2) establish Lead Partners with the capacity and authority to support small clusters of schools on behalf of districts and the state.
To meet the goal of beginning to turn around 20 schools a year, Massachusetts has to take a new approach to supporting struggling schools. We know what doesn’t work but, more importantly, we know what works.

Other states and cities across the nation are implementing turnaround strategies in struggling districts based on an approach that includes partnership zones and school clustering, flexibility for school leaders and Lead Partners. Chicago, New York and Philadelphia have all taken comprehensive approaches to turnaround with these elements and a portfolio strategy of charters and in-district turnaround. Massachusetts can learn from these turnaround strategies as it scales up its own efforts for meaningful school reform.
Mass Insight’s Excellence and No Excuses for Failure Agendas must be implemented together if Massachusetts schools are to truly lead the nation. By inserting the Excellence Agenda into all schools, we raise the ceiling for our students. By focusing on comprehensive turnaround strategies to improve our state’s struggling schools, we raise the floor. Only this dual focus on raising the ceiling to raise the floor will put Massachusetts on track to educating students who are first in the nation and first in the world.

To meet these urgent goals, the state must take action. The proposal to raise the charter school cap and increase state and district turnaround powers and capacity to take advantage of important opportunities for federal funding is a step in the right direction. However, the state should build upon these efforts by setting meaningful, measurable goals for the future that embrace both the Excellence and the No Excuses for Failure Agendas.

Massachusetts is ready for change and the time for action is now. By embracing Excellence and No Excuses for Failure, we can make Massachusetts first in the nation on closing the achievement gaps and put our state on the path to being first in the world.
On the 2007 administration of NAEP, “Massachusetts’ fourth-grade students outscored their peers in the other 49 states in reading and mathematics. At grade 8, students in Massachusetts scored first in mathematics, higher than students in the other 49 states and tied for first in reading with three other states” (Massachusetts Department of Education, 2007 NAEP Tests: Summary of Results for Massachusetts, http://www.doe.mass.edu/mcas/naep/results/default.html).

Page 2
2 www.collegeboard.com

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3 www.ed.gov

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4 Mass Insight, Mass Math & Science Initiative. Derived from data provided by the College Board. Copyright © 2008-2009 The College Board. www.collegeboard.com

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5 Mass Insight Education & Research Institute www.massinsight.org

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6 Mass Insight, Mass Math & Science Initiative. Derived from data provided by the College Board. Copyright © 2008-2009 The College Board. www.collegeboard.com
7 The Boston Foundation, Extrapolation of Massachusetts ESE and Boston PIC data
8 The Boston Foundation, Extrapolation of Massachusetts ESE and Boston PIC data
9 Massachusetts Department of Elementary and Secondary Education, www.doe.mass.edu/sda/ucd

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Rotherham, A. and Mead, Sara, The Challenged Index: Why Newsweek’s List of America’s 100 Best High Schools Doesn’t Make the Grade, Education Sector, February 2006, p. 2. www.educationsector.org

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13 Mass Insight, Mass Math & Science Initiative. Derived from data provided by the College Board. Copyright © 2008-2009 The College Board. www.collegeboard.com

Page 11
14 Mass Insight, Mass Math & Science Initiative. This design depicts the essential elements of the Mass Math & Science Initiative’s AP Training and Award Program. www.massinsight.org

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15 Massachusetts Department of Elementary and Secondary Education, School and District Profiles, http://profiles.doe.mass.edu
16 Mass Insight Education & Research Institute www.massinsight.org

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17 The Turnaround Challenge, Mass Insight, 2007
18 Massachusetts Department of Elementary and Secondary Education, School and District Profiles, http://profiles.doe.mass.edu

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- State Street Foundation, Inc.
- US Airways Education Foundation

**National School Turnaround Strategy Group**  
Justin Cohen, President

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## Useful Websites

**Mass Insight Education**  
www.massinsight.org

**The College Board**  
www.collegeboard.com

**The International Baccalaureate Program**  
www.ibo.org

**Race to the Top**  
www.ed.gov/programs/racetothetop/index.html

**U.S. News & World Report America's Best High Schools**  
www.usnews.com

**Education Sector**  
www.educationsector.org

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**Special thanks to our sponsor for this report:**

![The Boston Foundation Logo](image1)

![Mass Insight Education & Research Institute Logo](image2)

**William H. Guenther, President**

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