

Closing the Achievement Gaps

An Annual Massachusetts Report on Performance-Based High School Interventions and Turnarounds

Measures of Success

The Excellence Agenda:

- MA will lead the nation in participation and performance overall for AP*, especially math and science.
- MA will lead the nation in minority and low-income student participation and performance in AP, especially math and science.
- MA will be first in the world on international measures of math and science.

No Excuses for Failure:

- MA will meet the President's goal to begin to turn around 20 schools annually, including at least 5 high schools, significantly increasing performance within two years in each school.
- Massachusetts will lead the nation in closing the achievement gap and in raising college success rates for minority and low-income students.

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."¹ 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.²

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.

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:

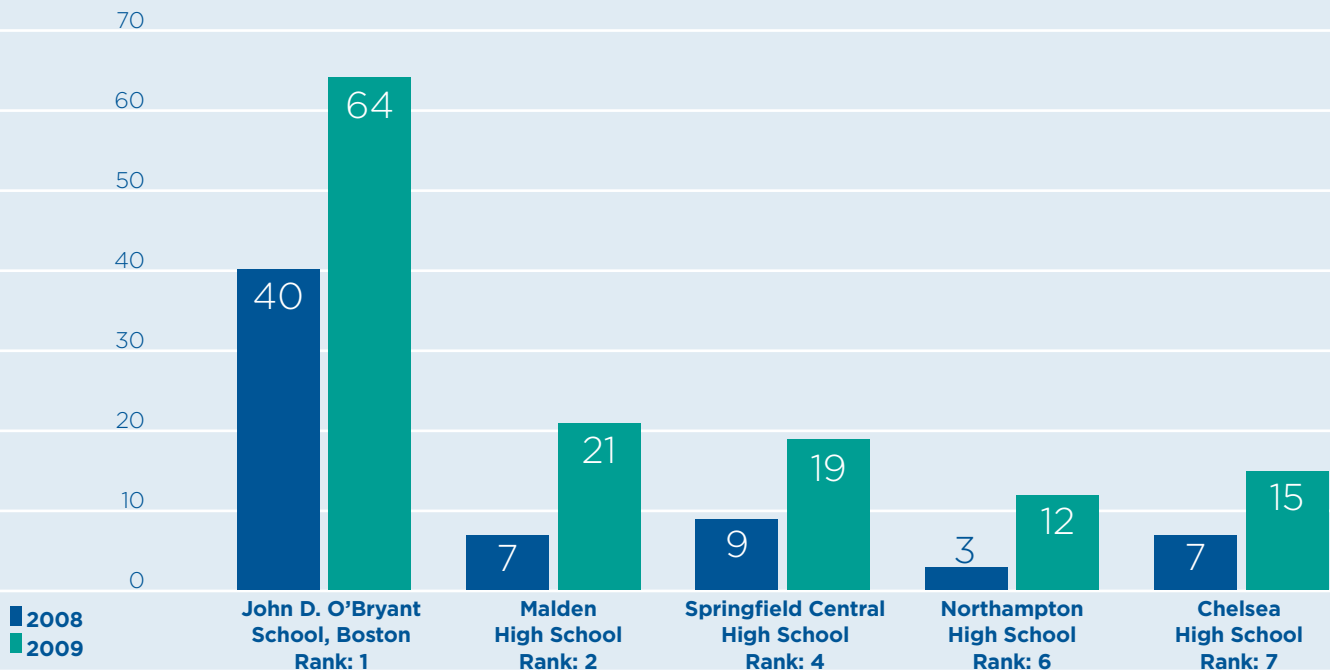
- Raise the state charter school cap to double the number of charter school seats in the worst performing districts
- Create in-district Readiness Acceleration Schools to address the key inhibitors to student achievement. Acceleration Schools would modify existing district and union rules, enhance curriculum 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 Success⁴



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.

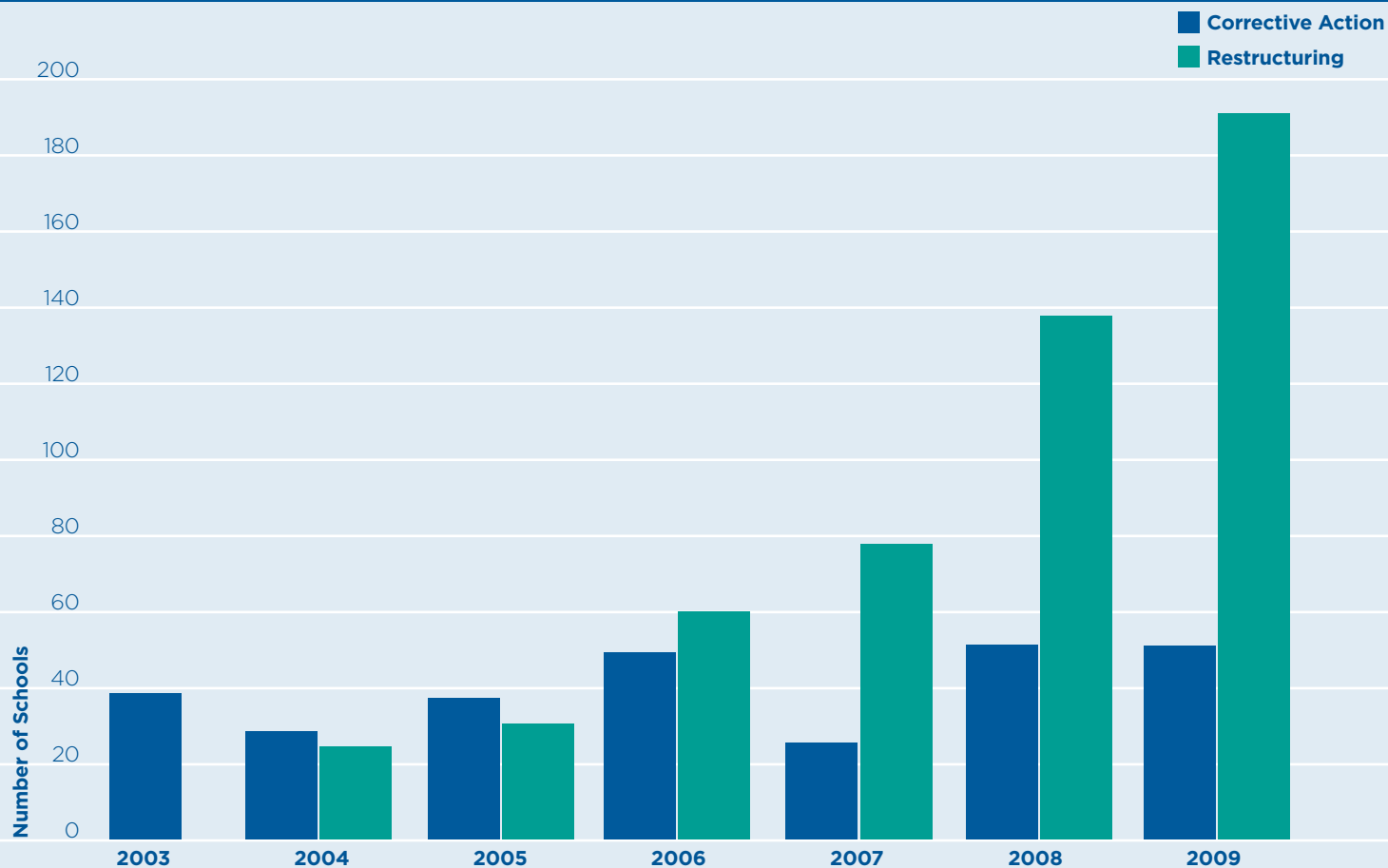
The Excellence Agenda

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.

INTRODUCTION

But Too Many Struggling Schools Have Made No Progress Over Time, Despite Repeated Interventions

Massachusetts Schools Not Making AYP⁵



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

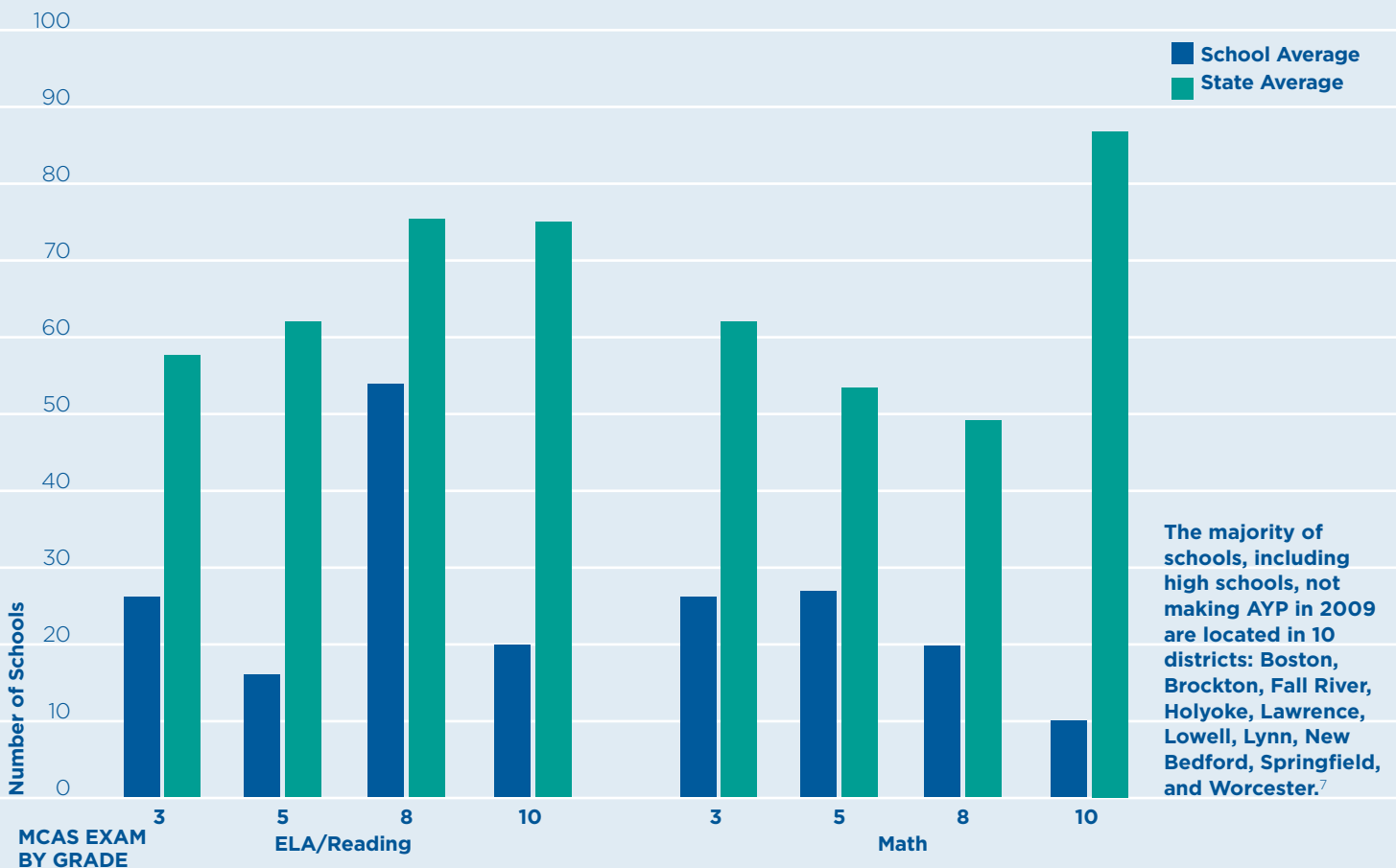
No Excuses for Failure

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 Restructuring⁶



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 2007.⁸

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.⁹

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.

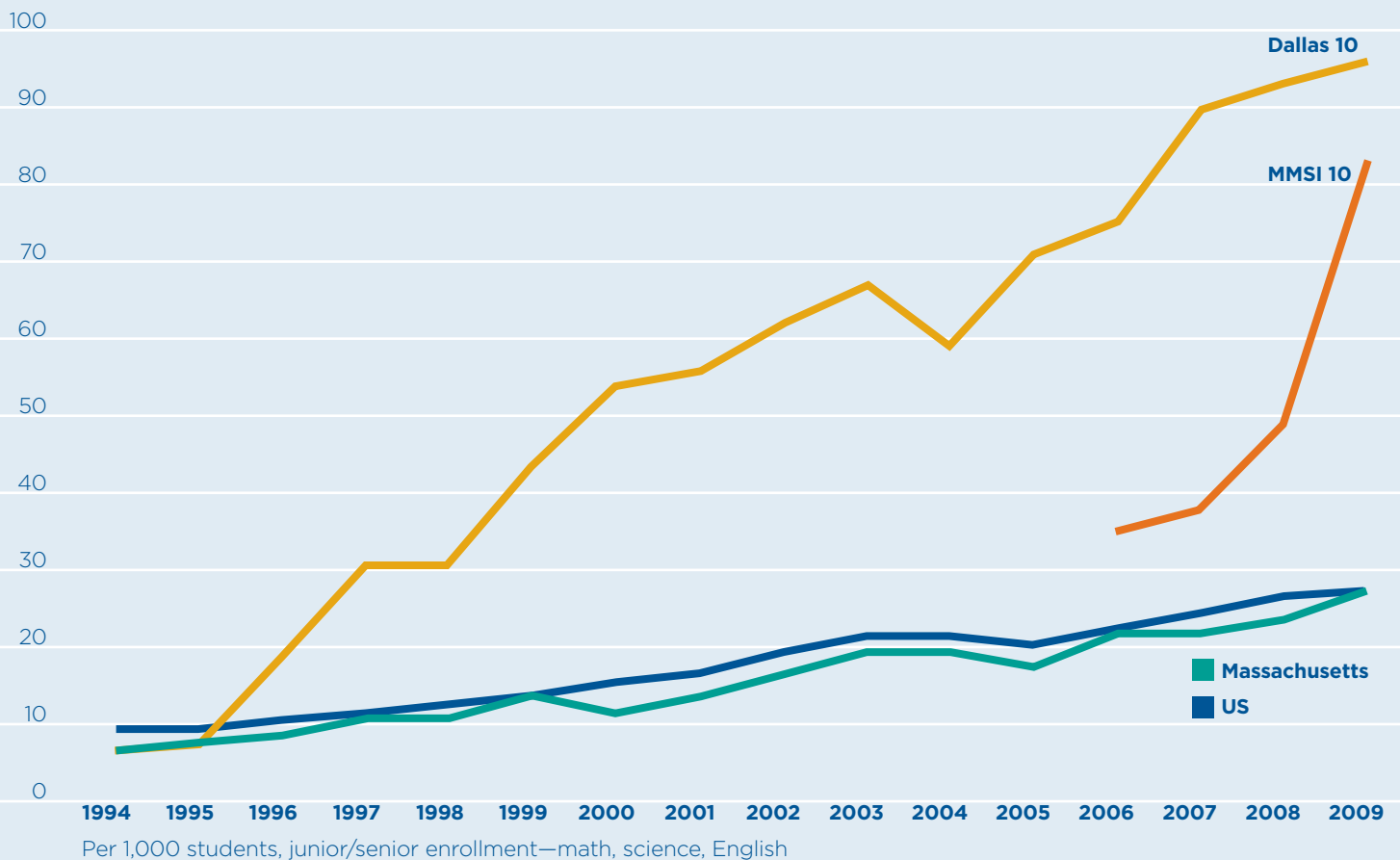
Schools such as those in the Commissioner’s Districts struggle not only to help students pass the Massachusetts Comprehensive Assessment System, but also to keep students in school and send them on to college. Low test scores, high drop out rates, and a lack of college readiness programs plague these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

EXCELLENCE

Massachusetts Overall Lags the Nation in AP Participation and Performance for Minorities

AP Qualifying Scores for African American and Hispanic Students¹⁰



Massachusetts Is Not a U.S. News High School Leader¹¹

Rank*	School/City
27.	Boston Latin, Boston, MA
100.	Belmont High, Belmont, MA

*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.¹²

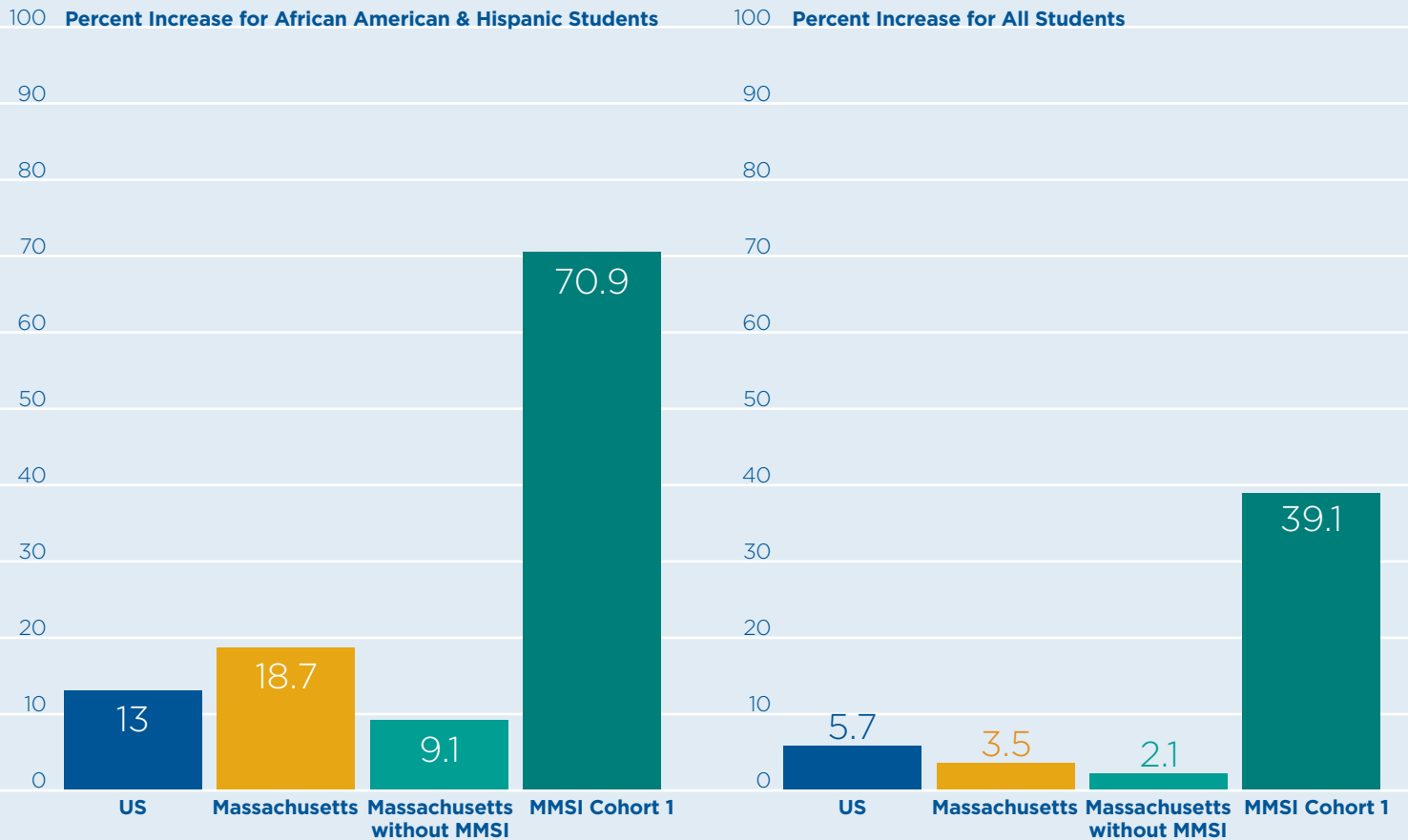
The Excellence Agenda: Where Are We?

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.

One Innovative Program Increases AP Access and Performance for Underserved Students

AP Exams, Scores of 3 or Greater, % Increase (Math, Science and English), 2008-2009¹³

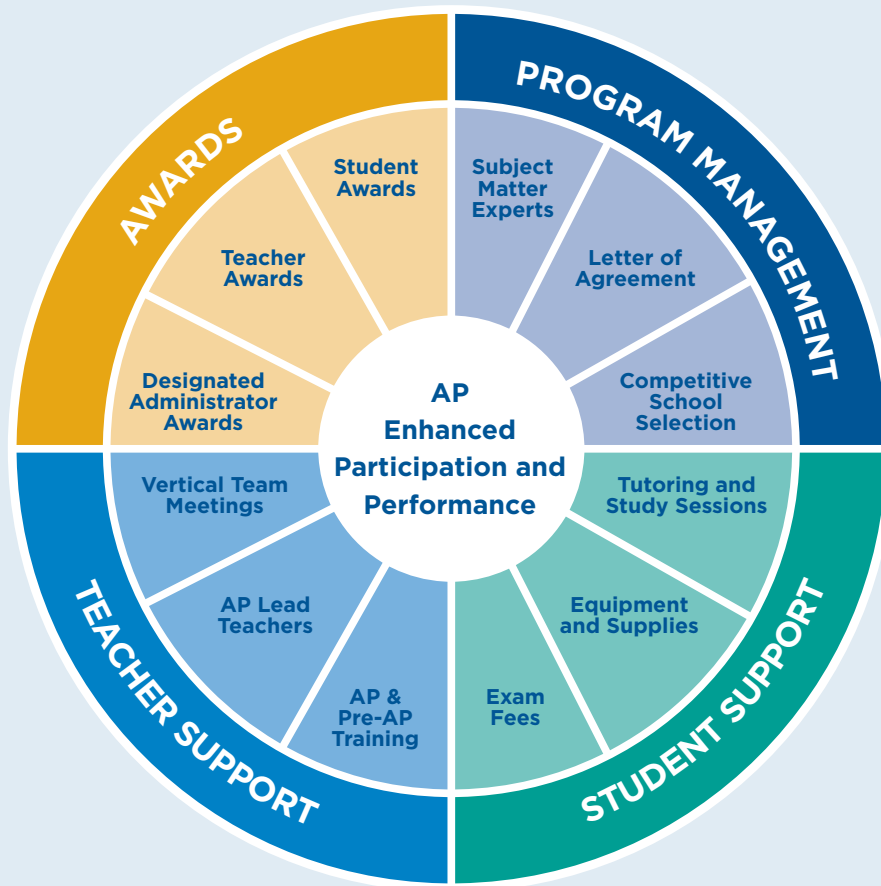


The Excellence Agenda: Where Do We Need to Be?

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 Key to MMSI's Success Is a Comprehensive Emphasis on Students, Teachers and Schools

Key Program Elements, MMSI¹⁴



MMSI Goals

- **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
- **Increase Performance:**
More qualifying scores (3/4/5) on AP examinations
- **Increase College Success:**
More students matriculating to and graduating from college

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.

The Future of Education in Massachusetts: An Excellence Agenda for Every School

The Excellence Agenda: Measurable Goals for the Future

- MA will lead the nation in participation and performance overall for AP*, especially math and science.
- MA will lead the nation in minority and low-income student participation and performance in AP, especially math and science.
- Massachusetts will lead the nation in educating high school students for success in college

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.

NO EXCUSES

Multiple State and District Interventions Have Not Led to Turnaround

Two High Schools Tell the Story¹⁵

The English High, Boston, Adequate Yearly Progress History

	2003	2004	2005	2006	2007	2008	% Below Proficient, 2009 MCAS, Grade 10
ELA (aggregate)	No	No	Yes	Yes	Yes	No	60%
ELA (all subgroups)	No	No	No	No	No	No	
Math (aggregate)	Yes	Yes	No	No	Yes	No	62%
Math (all subgroups)	No	No	No	No	No	No	

Dean Technical High School, Holyoke, Adequate Yearly Progress History

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

Genuine Transformation vs. Incremental Change¹⁶

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

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.

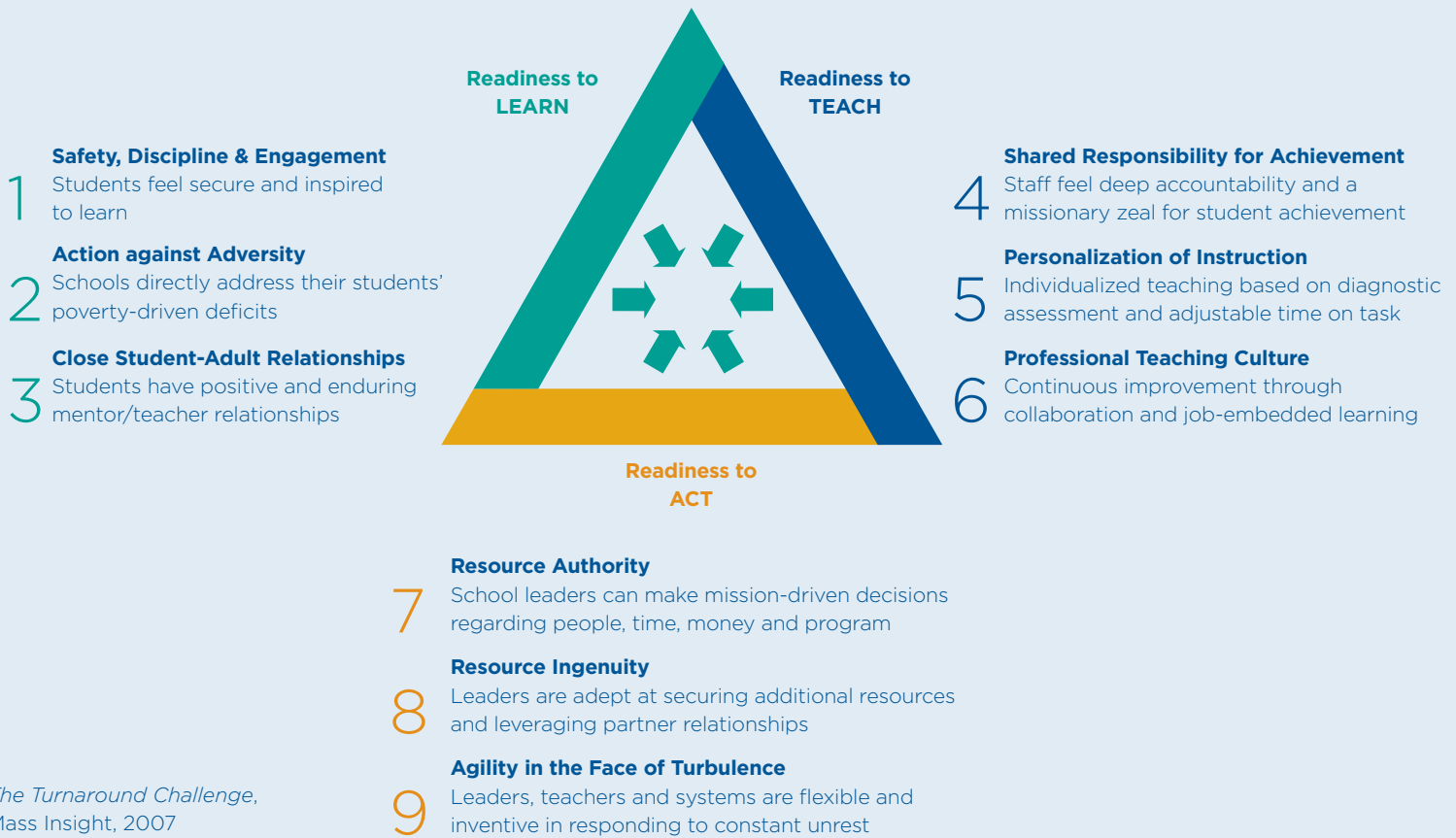
The English High School in Jamaica Plain, for example, has been identified for major reform. Designated a “Commonwealth Pilot School”, English was split into two small schools, an intervention meant to facilitate school improvement. Even the state’s deepest interventions, such as those implemented at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

*University Park High School, Worcester

NO EXCUSES

Some High Performing/High Poverty Schools Provide Models for Change

HPHP Readiness Model¹⁷



The Turnaround Challenge,
Mass Insight, 2007

Two High Poverty Schools in Massachusetts Set the Standard for Academic Achievement¹⁸

University Park Campus School, Worcester

- Founded on a partnership between Clark University and the City of Worcester
- All students pursue a college preparatory curriculum
- The vast majority of students attend college

MATCH Charter Public School, Boston

- A public charter school serving 220 students in grades 9-12
- In 2009 students ranked 1st in the state on math MCAS
- 99% of the first five graduating classes have been accepted into four-year colleges

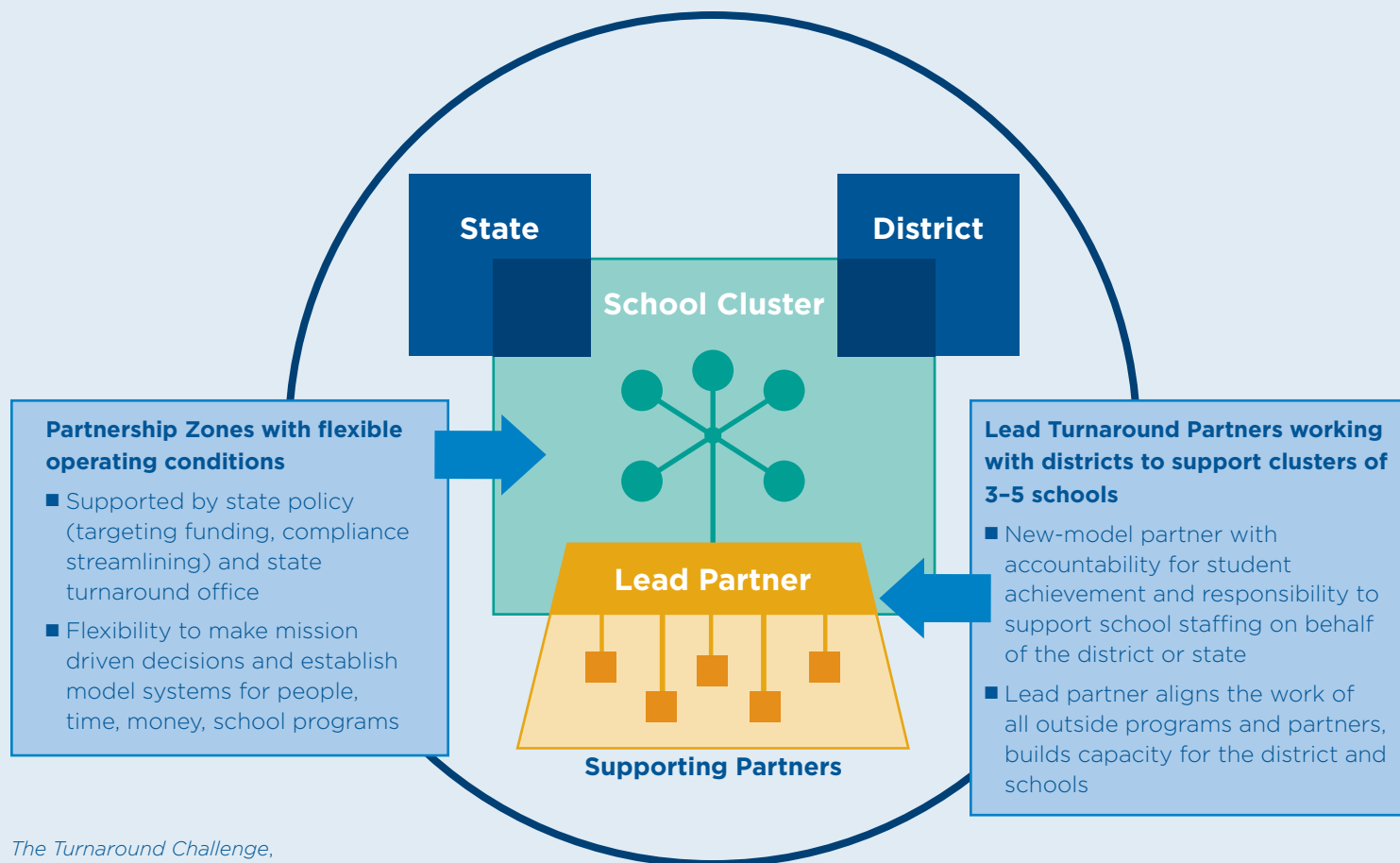
No Excuses for Failure: Where Do We Need to Be?

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

A Comprehensive Framework for School Turnaround Provides a Way Forward for Struggling Schools

Partnership Zones: Model Conditions, Capacity Through Partners, Scale Through Clusters¹⁹



The Turnaround Challenge,
Mass Insight, 2007

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.

NO EXCUSES

The Future of Education in Massachusetts: No Excuses for Failure

No Excuses for Failure: Measurable Goals for the Future

- MA will meet the President's goal to begin to turn around 20 schools annually, including at least 5 high schools, significantly increasing performance within two years in each school.
- Massachusetts will lead the nation in reducing the number of high school dropouts, especially among low-income and minority populations
- Massachusetts will lead the nation in closing the achievement gap and in raising college success rates for minority and low-income students.

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.

GOALS

First in the Nation, First in the World: Putting Massachusetts Schools on the Path to Success

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.

Massachusetts Goals for High School Excellence and Turnaround²⁰

PROPOSED GOALS	STATE		
	Programs Underway	Private Funding	Public Funding
The Excellence Agenda			
Lead the nation in participation and performance overall for AP*, especially math and science	MMSI	\$13.2 Million National + \$13 Million Local	\$0
Lead the nation in minority and low-income student participation and performance in AP, especially math and science			
Lead the nation in college completion, including low-income and minority students			
No Excuses for Failure			
Lead the nation by beginning to turn around 20 schools a year, including at least 5 high schools	Governor’s Acceleration/ Charter School Agenda Boston Proposed Legislation	\$0	Acceleration/ Turnaround 1003(g) Funding: \$75M Over 3 Years
Lead the nation in reducing the number of high school dropouts, especially among low-income and minority populations			
Lead the nation in closing the achievement gap and in increasing passing rates on MCAS for all students			

The Race to the Top Goals²¹

- Make substantial gains in student achievement
- Close achievement gaps
- Improve high school graduation rates
- Prepare students for success and college careers

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.

Cover

¹ 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>).

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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¹⁰ Mass Insight, Mass Math & Science Initiative. Derived from data provided by the College Board. Copyright © 2008-2009 The College Board. www.collegeboard.com

¹¹ U.S. News & World Report America’s Best High Schools www.usnews.com/

¹² Mathews, J., The Top of The class, The Complete List of the 1,500 Top US High Schools, June, 2008. www.newsweek.com/id/201160

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

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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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¹⁹ Mass Insight Education & Research Institute www.massinsight.org

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²⁰ www.ed.gov

²¹ www.ed.gov

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Morton Orlov II, 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

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www.educationsector.org

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