

Great Schools. College-Ready Students.

THE CHALLENGE

The Massachusetts economy demands a **talented workforce** of science, technology, engineering, and math professionals, yet every year thousands of promising students leave high school without having taken the challenging courses required to succeed in these fields.

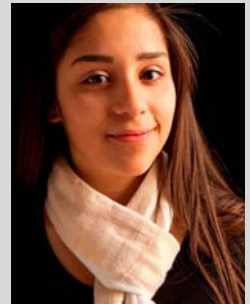
Moreover, **achievement and access gaps** persist in Advanced Placement* (AP) and other college-level math and science courses, particularly among Black and Hispanic students, female students, and students from low-income families. **In 2008, only 65 African-American public school students in Massachusetts passed an AP science exam.**

#The **Mass Math + Science Initiative (MMSI)**, the state's largest high school math and science program aimed at underserved students, has expanded access to rigorous, college-level Advanced Placement courses in 45 high schools across the Commonwealth.

Since 2008, the program has resulted in:

- a doubling of new enrollments in AP classes, with more than 4,000 added and
- a nearly 100% increase in the number of students earning qualifying scores on math, science and English AP exams.

By 2013, the program will engage more than 10,000 high school students annually, greatly increasing their likelihood of **college enrollment and completion.**

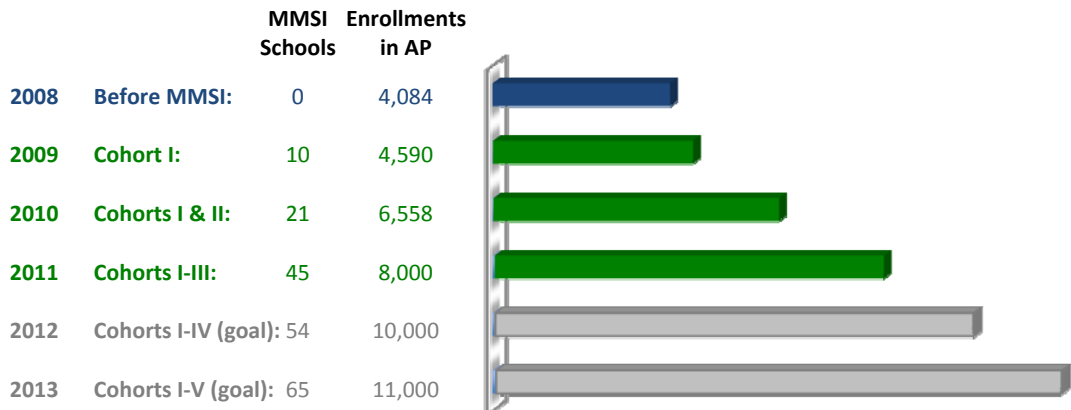


ABOUT MMSI

Massachusetts is one of six states selected to participate in an innovative program led by the **National Math and Science Initiative** to address the drastic decline in math and science education in the United States. A five-year, \$30 million initiative, MMSI was organized by **Mass Insight Education** in partnership with the Commonwealth of Massachusetts and private funders.

MMSI drives a school culture of **high expectations** and dramatically increases participation and performance in Advanced Placement courses, particularly among **underserved populations**, to prepare students for college and career success in science, technology, engineering, and mathematics (STEM).

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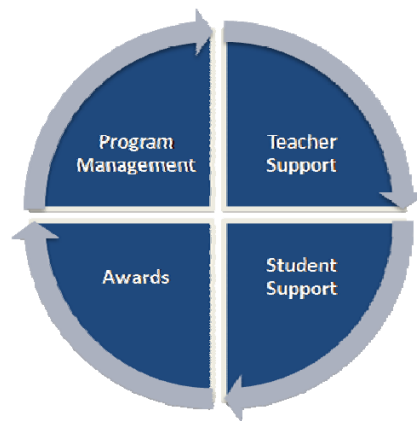
OUR STRATEGY FOR CHANGE

The number of Massachusetts students entering college prepared for and eager to pursue math and science careers dramatically increases when:

- Schools expand access to and encourage participation in Advanced Placement and other rigorous courses in grades 6-12.
- Teachers are expected, and trained, to engage a broader range of middle and high school students in college preparatory classes.
- Students are supported with tutoring and rewarded for success.

OUR PERFORMANCE-BASED, INTEGRATED PROGRAM

MMSI works in partnership with schools and districts to set high expectations and increase student participation and performance in AP classes. The cornerstones of the program are:



- **Program Agreement:** A signed agreement with every participating school and district that includes annual performance targets
- **Teacher Support:** Up to 72 hours of teacher training per year with ongoing support
- **Student Support:** 18 hours of extra instruction and support, for every student, through Saturday study sessions
- **Awards:** Privately-funded financial incentives for successful students and teachers

OUR GOAL: STUDENTS READY FOR COLLEGE

The program's success is evaluated in three measureable ways:

- **Increased participation:** greater student enrollment in math, science and English AP courses.
- **Increased performance:** more qualifying scores (scores of 3, 4, or 5) on AP examinations.
- **Increased college success:** more students matriculating to and graduating from college.

Nationally, six-year college graduation rates among African-American and Hispanic students rise from 15% to 60% if they score a three or higher on at least one AP exam.

For more information:

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