Across Massachusetts and nationwide, afterschool programs that focus on science, technology, engineering, and math (STEM) are stepping up to help students succeed in school today...

- Kids in afterschool programs attend school more often, get better grades and test scores, make gains in reading and math, and improve their work habits and classroom behavior.¹

...And prepare for the jobs of tomorrow

In Massachusetts, STEM jobs are among the fastest growing and highest paying. Over the next 10 years, Massachusetts is expected to need a workforce that can fill 280,000 more STEM positions². Employers are struggling to fill these jobs due to the gap between the skills employers need and the skills workers have.

Quality afterschool STEM programs inspire young people to pursue careers they never imagined before—and help them gain skills needed for virtually every job in the future. Among Massachusetts students participating in afterschool STEM³:

- Nearly 81% reported a positive gain in science career knowledge
- Nearly 76% reported a positive change in their interest in science
- More than 71% reported gaining interest in science careers
- More than 71% reported an increase in “science identity”—a personal belief that he/she can succeed at science
- More than 68% reported an increase in their perseverance and critical thinking skills

A study of Massachusetts programs found that they rated higher than the national average in the Dimensions of Success Measures of Purposeful Activities related to STEM, STEM Content Learning, and Relationships.

Quality afterschool programs engage kids emotionally, intellectually and socially; they are responsive to the culture and community of the participants; and provide supportive learning environments for kids and facilitators to learn and explore together.³

The Afterschool & STEM System Building Evaluation 2016 included 23 observations performed across 14 STEM programs from Massachusetts. It was conducted by The PEAR Institute: Partnerships in Education and Resilience at Harvard University and the Institute for Measurement, Methodology, Analysis & Policy at Texas Tech University. The research summary is available at stemreadyamerica.org.
Afterschool STEM compliments what kids learn at school and can almost double the amount of time some students have to question, tinker, learn and explore STEM topics. Providing students these opportunities is a sound investment you can support.

Afterschool STEM in MASSACHUSETTS: Zero Robotics

Zero Robotics is a middle school summer program where teams of students learn to program through a robotics competition that takes place inside the International Space Station. In Massachusetts last year, 13 programs made up of 198 students participated the hands-on STEM learning experience of Zero Robotics.

“Before ZR, my daughter had her heart set on being a hairdresser for the stars, now she wants to study the stars.”

CARLA CRISAFELLI,
Parent of a student on the Natick Novas, a competing team in Zero Robotics

Policymakers can help

- Protect the integrity of the ASOST-Q Line Item, which includes funding for quality STEM afterschool programming, and seek an increase in the funding to $5,500,000.
- With the possibility of a skinny budget from the federal government threatening 21st Century Community Learning Centers, protect the funding of vital Massachusetts’ centers that serve over 18,000 youth.
- Visit an afterschool STEM program
- Prioritize STEM, afterschool and other informal learning opportunities in the statewide ESSA plan
- Sign up to learn more about afterschool STEM in Massachusetts at www.massafterschool.org

1 www.afterschoolalliance.org/research.cfm
3 www.stemreadyamerica.org
4 https://www.nap.edu/read/21740/chapter/4