ABOUT THE PROJECT

Educational Opportunity in Massachusetts
Annenberg Institute at Brown University
edopportunityMA.org

Educational Opportunity in Massachusetts is a long-standing research-practice partnership between researchers at the Annenberg Institute at Brown University and the Massachusetts Departments of Elementary and Secondary Education and Higher Education. Our work analyzes how students progress through the state’s K-16 education system and into the workforce, with a specific focus on providing evidence to inform policy and practice in the Commonwealth. We use rich longitudinal data to explore students’ backgrounds in nuanced ways, including by race/ethnicity, first language spoken at home, immigrant status, and country of origin. Recent and ongoing lines of inquiry include the equity consequences of high-stakes exit exams, the impact of state policies and the pandemic on students’ educational outcomes, how schools affect economic opportunity for students living in poverty, and the experiences of immigrant newcomers in Massachusetts.

SUGGESTED CITATION


ACKNOWLEDGMENTS

This report was developed as part of a research-practice partnership with the Massachusetts Departments of Elementary and Secondary Education and Higher Education. The authors thank our partners (current and former), including but not limited to Matt Deninger, Elana McDermott, Mario Delci, Julie Albino, Allison Balter, Komal Bhasin, Carrie Conaway, Leldamy Correa, Robert Curtin, Michael Dannenberg, Kinnon Foley, Nyal Fuentes, Erica Gonzalez, Lien Hoang, Bob Lee, Andy Martin, Clantha McCurdy, Sasha Obraztsova, Regina Robinson, Kate Sandel, Michel Stapel, Lucy Wall, Craig Weller, Dan Wiener, Kendra Winner, and Jeff Wulfson. We also thank current Commissioners Russell Johnston and Noe Ortega, former Commissioners Jeff Riley and Carlos Santiago, Secretaries Patrick Tutwiler and James Peyser, and Board Chairs Chris Gabrieli and Katherine Craven for their input and support. Finally, we are indebted to past team members Lily An, Kate Donohue, Burke O’Brien, and Alan Perez, who contributed to some of the reports we reference here, and the many colleagues who read and commented on drafts of those reports. We are particularly grateful to Christina Claiborne, Carrie Conaway, Andrew Ho, Jack Schneider and Martin West for reviewing drafts of the current report; while their insights strengthened it tremendously, any errors and omissions remain our own. The research reported here was supported by the Spencer Foundation and the Institute of Education Sciences, U.S. Department of Education, through Grant R305H190035 to Brown University. The opinions expressed are those of the authors and do not represent views of the Spencer Foundation, the Institute, or the U.S. Department of Education.

This report was designed by Robyn Hartt of RHarttGraphics.com.
EXECUTIVE SUMMARY

Across Massachusetts, legislators, policymakers, educators, families, and communities are engaged in important conversations about whether to continue using student performance on the MCAS tests as part of the state’s high-school graduation requirements. In this document, we synthesize lessons drawn from our 15-plus years of research on educational opportunity and state testing in Massachusetts. Here, we highlight the six main findings and key supporting evidence, with page numbers from the full report included for easy reference.

1. FINDING 1

Students’ MCAS test scores and high-school course grades both predict long-term outcomes. In the past decade, grades have risen while test scores have fallen, raising concerns about the signals students receive about their college and career readiness.

- Even among students with the same demographic profile who earned the same GPA at the same high school, those with higher MCAS scores have better long-term outcomes, on average. (Page 4)
- An analogous relationship holds for high-school course grades. Comparing students with the same MCAS scores, students with higher grades have better outcomes. (Page 7)
- Increases in MCAS ELA scores and math scores since 2009 are not reflected on the lower-stakes National Assessment of Educational Progress (NAEP). (Page 9)
- Since 2011, the share of students earning an A or B has increased substantially in all core academic subjects. Grade inflation appears to have accelerated during the pandemic, when grades went up markedly while test scores and attendance both declined sharply. (Page 11)

2. FINDING 2

Students who score just above the competency determination (CD) threshold on the MCAS tests enroll in college at low rates and do not earn a living wage by age 30, on average.

- Among students scoring just above the passing cutoff who later enrolled in at least one college math course, only 14% earned credit in that course. In total, only one in six students scoring just above the threshold in math earned any college degree within 9 years of taking the test. (Page 12)
- The median annual earnings in 2022 of students scoring at the passing cutoff in 2006-08 was about $38,000, just 1.37 times the federal poverty level for a family of four. (Page 13)
While most students meet the CD testing standard on their first attempt, nearly all of those who fail are English learners (ELs), students with disabilities, and/or students with inadequate course preparation.

- English learners and students with disabilities make up very large percentages of students who initially fail - 78% in math, 84% in ELA, and 72% in science. (Page 15)

- Students who were enrolled in a below-grade-level math course or did not pass their grade-level course make up 12% of test-takers but nearly half of students who fail to meet the CD testing standard on their first attempt. (Page 17)

Passing the MCAS matters: Students who barely pass the test on their first attempt have better outcomes than those who just fail it.

- Among test-takers from low-income families in 2003-07, those who barely met the MCAS math testing standard (i.e., passing) were 3 percentage points more likely to graduate from high school than those who fell just short of the cutoff. (Page 18)

- Among those from higher-income families, the impact on four-year college enrollment was 6 percentage points and 3 percentage points on graduation. (Page 18)

- We do not know if failing hurts students or passing helps them (or both). Students who fail may become discouraged and drop out, while students who pass may be encouraged and persist at greater rates than they would have otherwise. (Page 19)

While most students who initially fail go on to retake the test and pass, about 85% of those who never pass are English learners or students with disabilities. The MCAS scores of high-school ELs underpredict their later earnings relative to other students.

- Students who were English learners in 10th grade earn more at age 30 than their non-EL peers with similar test scores and attainments, suggesting that MCAS scores for ELs understate their potential. (Page 22)

- High-school immigrant newcomers represent 5% of those who attempt at least one of the MCAS tests but fully one third of those who never pass; this share is likely to increase as the number of newcomers grows and the new, higher passing threshold on the ELA test takes effect for the class of 2026. (Page 23)

Most high schools that boost test scores also improve long-term outcomes like earnings. However, some schools, including some career and technical education (CTE) schools, improve students’ long-term earnings without raising test scores, while other schools may overly focus on test preparation at the expense of broader skill development.

- We estimate how effective schools are at improving college outcomes and earnings. Similar low-income students who attended a school at the 80th percentile of the effectiveness distribution instead of a school at the 20th percentile were 60% more likely to graduate from a four-year college, and they earned 9% (or $2,500) more annually at age 30. (Page 24)