

# Condition of Education IN THE COMMONWEALTH 2015 DATA REPORT

The Condition of Education in the Commonwealth project provides an annual, evidence-based review of student progress and proficiency throughout the education pipeline from birth into adulthood. Serving as a bellwether for Massachusetts' education reform agenda, the project examines learning outcomes and investigates policy solutions to support continuous improvement in education practice. Massachusetts has a well-earned reputation as a national leader in student achievement based on a substantial commitment to its public education system dating back to the Education Reform Act of 1993. Efforts to address continuing challenges—ranging from a lack of school readiness, to a lingering proficiency gap, to the need to ensure all students are college and career ready—have led to increasingly sophisticated, but, at times, disjointed approaches to reform. While each new initiative bears promise, long-term success for all students requires the development and constant maintenance of a more comprehensive vision. Effective reform results from understanding our current status as a state, monitoring changes over time, and acting on new information describing both our strengths and deficits. The Condition of Education project asks whether our entire education system is properly structured to ensure all students succeed.

The 2015 *Condition of Education in the Commonwealth* includes the second annual Data Report and new Action Guide, presenting choices for policymakers to consider how best to improve public education in Massachusetts. The 2015 Data Report identifies and measures state-level indicators linked to outcomes to inform decision-making among Massachusetts education leaders. These indicators focus on critical stages in learning and development from school readiness and early learning to the emergence of a strong and productive workforce. Important indicators in science, technology, engineering, and mathematics (STEM) are highlighted at each stage, and specific attention is leveled at the need for prepared and effective educators to support student progress throughout our entire education system. Indicators are selected because of their evidentiary base and alignment with Massachusetts' reform agenda and updated at least every two years. This report provides a critical overview of our public education system, while presenting data and information to encourage more nuanced discussions of potential strategies for improving student learning outcomes.

## ADVISORY COMMITTEE

The Rennie Center would like to thank members of the *Condition of Education in the Commonwealth* Advisory Committee for their support and guidance in the development of this data report. The Advisory Committee plays a critical role in helping the Rennie Center team identify important transitions in student learning (and representative data points), as well as investigate policy solutions that may lead to improved educational outcomes. This work requires careful reflection and candid conversation on current progress and the goals we ultimately hope to achieve. Moving forward, we will continue to draw on the expertise of these and other Massachusetts education leaders to update and refine our data report in an effort to capture the full range of learning experiences that define a successful education.

**Beth Anderson**  
Phoenix Charter Academy Network

**Noah Berger**  
Massachusetts Budget and Policy Center

**JD Chesloff**  
Massachusetts Business Roundtable

**John D'Auria**  
Teachers21

**Ben Forman**  
MassINC

**Sheila Harrity**  
Montachusett Regional Technical High School

**Alan Ingram**  
Department of Elementary and Secondary Education

**Jason Irizarry**  
University of Massachusetts

**Aundrea Kelley**  
Quincy College

**Liam Kerr**  
Democrats for Education Reform

**Natalie Lacireno-Paquet**  
WestEd

**Nonie Lesaux**  
Harvard Graduate School of Education

**Edward Liu**  
Boston Teacher Residency

**Amy O'Leary**  
Strategies for Children/Early Education for All

**Jake Murray**  
Aspire Institute

**Linda Noonan**  
Massachusetts Business Alliance for Education

**Laura Perille**  
EdVestors

**Carlos Santiago**  
Department of Higher Education

**Chris Smith**  
Boston After School & Beyond

**Scott Solberg**  
Boston University School of Education

**Paul Toner**  
Massachusetts Education Partnership

**Joan Wasser Gish**  
Board of Early Education and Care

**Abby Weiss**  
Jumpstart

**Marty West**  
Harvard Graduate School of Education

**Jonathan Zaff**  
America's Promise Alliance

## RENNIE CENTER BOARD OF DIRECTORS

**Maura Banta**, IBM Corporation, Board of Higher Education

**Laurie Brennan**, TERC

**Celine Coggins**, Teach Plus

**Pendred Noyce**, The Noyce Foundation, Board of Elementary and Secondary Education

**Paul Reville**, Harvard Graduate School of Education

**Robert Schwartz**, Harvard Graduate School of Education

**Joel Vargas**, Jobs for the Future

## This Data Report is generously supported by

**Barr Foundation**  
**Houghton Mifflin Harcourt**  
**IBM Corporation**

**Irene E. and George A. Davis Foundation**  
**Noyce Foundation**  
**Verizon Communications**

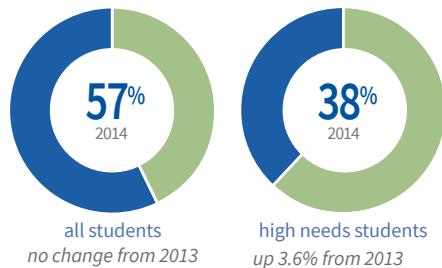
Suggested Citation: Rennie Center for Education Research & Policy. (2015). *Condition of Education in the Commonwealth: 2015 Data Report*. Boston, MA: Rennie Center for Education Research & Policy.

©2015 by Rennie Center for Education Research & Policy. All rights reserved.

## Readiness & Early Learning

focus: birth through third grade

Children's first few years are characterized by enormous cognitive, social, and emotional growth. Quality early learning experiences create a strong foundation for future success and are linked to improved academic performance. Critical factors include ensuring access to high-quality early education and care, assessing school readiness in kindergarten, and providing full-day kindergarten to ensure all children are on track to be proficient readers by third grade.



**64%** Children aged 0-5 eligible for a subsidy and enrolled in **high-quality early education** programs  
prior year's data unavailable

**31%** Students assessed on the Massachusetts **kindergarten entry assessment**  
up 21.2% from 2013

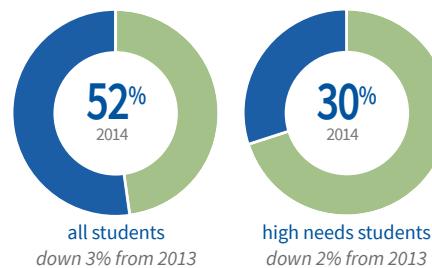
**88%** Students attending **full-day kindergarten**  
up 1.9% from 2013

Students scoring proficient or advanced on the **3rd grade English language arts MCAS**

## Performance & Engagement

focus: fourth grade through eighth grade

Massachusetts has earned a reputation as a national leader in education by setting high expectations and promoting rigorous content standards and aligned assessments. Equally important is an emerging commitment to support strategies that allow all students to focus on learning challenging content. This means creating inclusive school and classroom settings that promote academic achievement, while attending to the needs of the Commonwealth's most at-risk populations.



**STEM** Students scoring proficient or advanced on the **8th grade math MCAS**

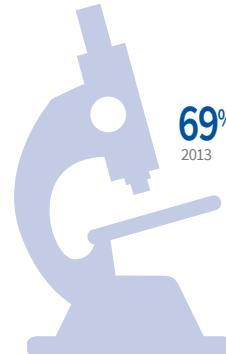
**9%** Students **transferring into or out of a school** during the school year  
down 0.5% from 2013

**12%** Students **absent from school** 10% or more of days enrolled  
up 0.4% from 2013

**59%** Students with Individualized Education Programs (IEPs) spending 80% or more of their day in **inclusive settings**  
up 1.1% from 2011

## Prepared & Effective Educators

To accomplish its goals for education, the Commonwealth needs a well-prepared and effective educator workforce. This includes strong preparation and appropriate credentials for school leaders and teachers, including those educating our youngest learners and special needs students. Educators must demonstrate significant content knowledge and engage in evaluation processes that allow for continuous improvement in their craft.

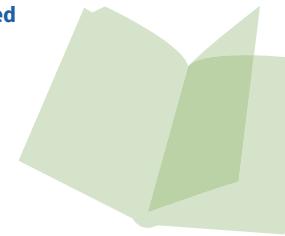


**69%** **STEM** 8th grade math teachers with an undergraduate **major/minor in math or science**  
up 17% from 2011

**95%** Teachers evaluated as proficient or exemplary  
prior year's data unavailable



**30%** Early and out-of-school time educators with a bachelor's degree or higher  
down 0.4% from 2013

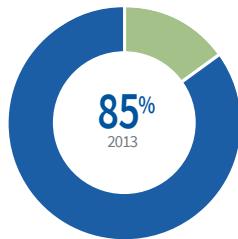


**93%** Teachers graduating from a Massachusetts preparation program **employed in schools for at least two years**  
prior year's data unavailable

## Preparation & Transitions

focus: ninth grade through high school graduation

A high school diploma must constitute a range of learning experiences that ensure college and career readiness. Critical steps include completion of ninth grade coursework and mastery of a rigorous program of study. Steps must also be taken to prevent students from dropping out, as well as to reengage and recover youth disconnected from school and/or employment to ensure future learning and success.



Students **graduating from high school** in four years  
up 0.3% from 2012

**79%** 2014 Students **passing all 9th grade courses**  
up 1% from 2013

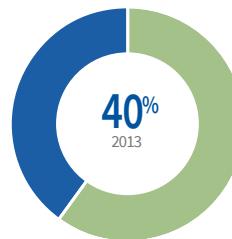
**all 70%** 2013 **high needs 59%** 2013 **STEM** Students **completing MassCore coursework**  
all students up 1.8% from 2012  
high needs students up 3.3% from 2012

**10%** 2012–2013 Youth aged 16-24 **neither in school nor employed**  
up 0.1% from 2011-2012 two year average

## Progress & Attainment

focus: postsecondary to career

Today's knowledge economy has set an expectation for students to complete a postsecondary degree or credential. However, a substantial number of high school graduates remain unprepared for college coursework and place into developmental (remedial) courses at college entry. Ensuring completion of academic programs at two- and four-year institutions, while providing students with marketable skills—especially in the STEM and health fields—is important to sustaining our economic productivity.



Massachusetts adults with a **bachelor's degree or higher**  
Up 1% from 2012

**35%** 2013 Students enrolled in **developmental (remedial) courses** in college  
down 1.5% from 2012

**47%** 2012 **Community college** students earning a degree/certificate, 30+ credits, or transferring to four-year institution in six years  
up 1.1% from 2011

UMass state univ. **60%** 2012 **53%** 2012 Students **graduating from UMass and state universities** within six years  
UMass up 1.6% from 2011  
state universities up 1.6% from 2011

**31%** 2014 Postsecondary degrees/certificates awarded in **STEM and health fields**  
up 2% from 2013

### NOTES

All indicators refer to students in Massachusetts public education systems, unless otherwise noted.

**High needs students:** "High needs" is defined by the Massachusetts Department of Elementary and Secondary Education as all students belonging to the following subgroups: low-income, students with disabilities, English language learner/former English language learner.

**STEM** Science, technology, engineering and mathematics (STEM) related indicators.

### DATA SOURCES

Massachusetts Department of Early Education and Care; Massachusetts Department of Elementary and Secondary Education; Massachusetts Department of Higher Education; United States Census Bureau: American Community Survey; United States Department of Education: Integrated Postsecondary Education Data System.

## ADDITIONAL INFORMATION

All indicators refer to students in Massachusetts public education systems, unless otherwise noted. Additional information is provided below for indicators where definitions and collection methods are not self-evident.

### Readiness & Early Learning

#### Children aged 0-5 eligible for a subsidy and enrolled in high-quality early education programs:

defined as percent of children aged 0-5 eligible for financial assistance provided through the Massachusetts Department of Early Education and Care enrolled in high-quality early education programs, defined as self-assessed at a QRIS level 2 or above.

*Some indicators in this area were not included—such as child well-being (social-emotional health) and kindergarten entry assessment outcomes—due to lack of statewide data availability at the time of publication, but may be included in future iterations of the report.*

### Performance & Engagement

**Students transferring into or out of a school during the school year.** This indicator is the statewide “churn rate,” representing students enrolled in public schools that are not reported as enrolled in the same school throughout the year. This is one of multiple measures used to assess student mobility.

**Students absent from school 10% or more of days enrolled.** This indicator is commonly referred to as the “chronic absence” or “chronic absenteeism” rate.

**Students with Individualized Education Programs (IEPs) spending 80% or more of their day in inclusive settings:** defined as percent of students aged 6-21 with Individualized Education Programs (IEPs) who are served inside a general education classroom 80% or more of the day. An IEP is a legal document mandated by the federal Individuals with Disabilities Education Act that defines a specialized set of education services provided to a student with a disability, including all students with a special education designation.

*Some indicators in this area were not included—such as participation in after- and out-of-school time programs—due to lack of statewide data availability at the time of publication, but may be included in future iterations of the report.*

### Preparation & Transitions

**Students passing all 9th grade courses:** defined as percent of students in grade 9 taking and passing all of their coursework. Students were considered “passing” a course if they received a letter mark of D- or higher; a categorical mark of passing, minimally acceptable, acceptable, good or outstanding; a numeric mark of 59.5 or higher; or received full credit in a credit-bearing course.

**Students completing MassCore coursework.** The Massachusetts High School Program of Studies (MassCore) recommends a comprehensive program of studies for students to complete before graduating from high school. The program includes: four years of English, four years of mathematics, three years of lab-based science, three years of history, two years of the same foreign language, one year of arts, and five additional courses. MassCore also includes additional learning opportunities, such as Advanced Placement classes, dual enrollment, a senior project, online courses for high school or college credit, and service or work-based learning.

**Youth aged 16-24 neither in school nor employed.** These youth, often referred to as “disconnected” or “opportunity” youth, may or may not have completed a high school diploma or General Educational Development (GED) credential. They also may or may not have enrolled in and attended a postsecondary education institution at some point.

*Some indicators in this area were not included—such as high-level math/science course-taking, service-learning participation—due to lack of statewide data availability at the time of publication, but may be included in future iterations of the report.*

### Progress & Attainment

**Massachusetts adults with a bachelor's degree or higher:** defined as percent of all adults in Massachusetts aged 25 and over with a bachelor's degree, graduate degree, professional, or doctoral degree. This indicator is often referred to as the “educational attainment rate.”

**Students enrolled in developmental (remedial) courses in college:** defined as percent of all first-time, full-time, degree-seeking students who graduated from a Massachusetts public high school the previous year and who enrolled in at least one developmental (remedial) course when enrolling at a Massachusetts public institution of higher education (a community college, state university, or University of Massachusetts). Developmental courses are designed to prepare students for college-level work and do not count toward a degree. Students typically enroll in these courses based on placement exam performance.

**Community college students earning a degree/certificate, 30+ credits, or transferring to four-year institution in six years:** defined as percent of first-time, degree-seeking Massachusetts community college students who, within six years of initial enrollment, earn an associate's degree or certificate, transfer to a four-year institution, or are still enrolled with at least 30 credits earned. This indicator represents a Six-Year Community College Student Success Rate, developed by the Achieving the Dream state data team in consultation with Jobs for the Future.

**Students graduating from UMass and state universities within six years:** defined as percent of all first-time, full-time, bachelor's degree-seeking students graduating from the University of Massachusetts or state universities within six years of initial enrollment.

*Some indicators in this area were not included—such as career/workforce experience and labor market outcomes for graduates of institutions of higher education—due to lack of statewide data availability at the time of publication, but may be included in future iterations of the report.*

### Prepared & Effective Educators

**Teachers evaluated as proficient or exemplary:** defined as percent of all K-12 educators achieving proficient or exemplary rating on the Massachusetts Framework for Educator Evaluation.

**Early and out-of-school time educators with a bachelor's degree or higher:** defined as percent of all educators in family, small group and school age, and large group and school age child care with a bachelor's degree, graduate degree, professional, or doctoral degree who self-report in the Professional Qualifications Registry (PQ Registry). All educators, including assistants, working in child care settings licensed by the Massachusetts Department of Early Education and Care are required to register with the PQ Registry.

**License waivers issued to teachers are in special education:** defined as percent of all license waivers issued to teachers for special education positions in public schools. For all open educator positions, a school district must demonstrate a “good faith” effort to hire a licensed educator. If a district experiences a “great hardship” in securing a qualified candidate, a superintendent may apply for a waiver from the Commissioner. The first waiver exempts the district for one school year from the requirement to employ licensed personnel for an open position. For any subsequent waivers, the district must document the educator employed is making significant progress toward meeting the requirements for licensure in the field in which they are employed.

*Some indicators in this area were not included—such as information about administrators and non-teachers school-based staff—due to lack of statewide data availability at the time of publication, but may be included in future iterations of the report.*