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A note for readers using the hard copy of this document: Throughout the document, blue text signifies hyperlinks in the electronic version, leading to outside resources. For access to these resources, please see the electronic version of this document at the DFER Massachusetts website, https://edreformnow.org/chapters/massachusetts/.

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Introduction

Over the past three decades, Massachusetts has emerged as the country's leader in K-12 public education. Since the Education Reform Act of 1993 and the Achievement Gap Act of 2010, Massachusetts has seen significant advances across demographic groups. The November 2019 Student Opportunity Act expanded on this legacy by committing \$1.6 billion to districts over seven years and attaching accountability measures to ensure the funding yields results for students. Aided by these landmark pieces of legislation, Massachusetts has seen laudable success by the benchmark of overall achievement.

At the same time, the Commonwealth has struggled to achieve the goal of equity.

While gains have occurred across demographic groups, opportunity and achievement gaps remain wide and persistent. For many students, especially students of color, students from low-income communities, students with disabilities, and students whose first language is not English, Massachusetts' first-in-the-nation status hides a reality of unacceptable educational outcomes.

The COVID-19 pandemic both revealed and exacerbated existing inequalities and frustrated efforts to address them. Much work remains to achieve high-quality education for all students.

The aim of this document is to provide tools, information, and research to support that work toward greater educational equity. For many who want to understand and impact K-12 education, the landscape can appear overwhelming, demanding a grasp of factors including the various roles of federal, state, and local governments; changing student demographics and needs; and politically charged topics. By providing a structured overview of who does what

in education policy making, along with some research on what works, we hope to help readers improve their understanding while providing opportunities for further learning and inquiry.

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This is the second edition of the Massachusetts Education Policy Primer. The first edition, released in 2020, focused on K–12 education policy alone. This new, 2023 edition expands and updates that content while adding new sections on public higher education, preschool, and the COVID-19 pandemic and the K–12 response. Within that domain, its scope is wide, including research on topics as diverse as education funding methods, assessment practices, special education, and teacher preparation. On each of these topics, we distilled the current state of research, with links to individual studies so interested readers can dive further. Our hope is that this document will serve as a resource and launching pad for wellinformed decisions that will improve education for all Massachusetts students, especially those who have been underserved.

Section 1

History of Education Policy in Massachusetts

Today, Massachusetts is well-known as a national vanguard in public education. The Commonwealth boasts the country's first public school; the earliest law establishing compulsory public education; and a pioneering record in ensuring high standards and state accountability. John Adams famously enshrined the right to public education in Massachusetts' Constitution, the oldest written constitution still in use. Horace Mann, the father of public schooling in the United States, was born in Massachusetts and became the Commonwealth's first secretary of education. From these auspicious beginnings, Massachusetts has risen to become the country's recognized leader in public education.

Nonetheless, it has taken Massachusetts centuries to make good on Adams' exhortation to "cherish" public schools. Today, the Commonwealth suffers from large achievement gaps, and too many students are left behind—especially students of color, students from low-income backgrounds, students with disabilities, and students whose first language is not English. As Massachusetts looks to the future of education policy, its leaders need to provide the targeted funding identified by the Student Opportunity Act while also aggressively addressing gaps that have widened during the COVID-19 pandemic and extending the Commonwealth's excellence in education to all its students.

"Wisdom and knowledge, as well as virtue, diffused generally among the body of the people, being necessary for the preservation of their rights and liberties, [...] it shall be the duty of legislatures and magistrates, in all future periods of this commonwealth, to cherish the interests of literature and the sciences, and all seminaries of them."

-Massachusetts Constitution, 1780

Timeline

1635	Boston Latin School is founded as America's first public school.	1954	•	The U.S. Supreme Court decides Brown v. Board of Education of Topeka,	
1642	Massachusetts Bay Colony passes the first law in the Americas requiring children to be educated—though not all children are included.			ruling that "separate educational facilities are inherently unequal" and thereby barring discrimination by race in public education.	
1647	Massachusetts Bay Colony requires all towns with 50 or more families to establish a public elementary school. Towns with 100 or more families are required to establish a Latin	1965		Congress passes and President Lyndon B. Johnson signs the Elementary and Secondary Education Act, establishing federal funding and accountability measures in public education.	
1780	(secondary) school. The Massachusetts Constitution, drafted by John Adams, enjoins the Commonwealth "to cherish the			Massachusetts legislature passes the Racial Imbalance Act, requiring the desegregation of the Commonwealth's schools.	
	interests of literature and the sciences, and all seminaries of them; especially the university at Cambridge [and] public schools and grammar schools in the towns." This language remains in force	1966		Beginning of METCO (Metropolitan Council for Educational Opportunity), a voluntary desegregation program in which suburban towns enroll students from Boston (and later Springfield).	
1837	to this day. Massachusetts Board of Education is founded (today: Board of Elementary and Secondary Education). Horace Mann is the state's first education secretary.	1974		The U.S. Supreme Court rules in Milliken v. Bradley that busing for the purpose of desegregation cannot be required across district boundaries. Nor can district boundaries be redrawn by court order for the purpose of desegregation.	
1839	Massachusetts' first professional school for the education of teachers is established.			With his ruling in Morgan v. Hennigan, Judge Arthur Garrity initiates school	
1852	Massachusetts becomes first state to make education compulsory for students aged 8–14 years.	1988 1991		desegregation by busing in Boston. Court-controlled busing ends in Boston. Massachusetts Business Alliance	
1855	Massachusetts legislature affirms in legislation that "no distinction shall be made on account of race, color or religious opinions" in determining admission to any public school.	-55-		for Education releases <i>Every Child a Winner</i> , proposing a reform plan of high standards, accountability, and progressive education funding	
1909	Commissioner of Education (today: Commissioner of Elementary and Secondary Education) is established.	1993		In McDuffy v. Secretary of the Executive Office of Education, the Massachusetts Supreme Judicial Court rules that Massachusetts' educational inequities are unconstitutional, and that the Commonwealth must enact a plan to address them. This decision followed years of lawsuits dealing with inequitable education in Massachusetts, dating to Webby v. Dukakis in 1983.	

After several years of work, the legislature passes the 1993 Education Reform Act, establishing the Chapter 70 formula to provide state aid to school districts as well as high standards, test-based accountability to those standards, and public school choice through charter schools. Through Chapter 70, the state allocated \$1.3 billion to districts in 1993, and has allocated \$89 billion through 2019.

2011

Lawrence Public Schools becomes the first district to come under state receivership under the 2010 Act Relative to the Achievement Gap. Holyoke Public Schools goes into receivership in 2015, and Southbridge Public Schools follows in 2016.

2019

Massachusetts legislature passes the Student Opportunity Act, acting on the recommendations of the Foundation Budget Review Commission, which found that the state's school funding formula should be updated to reflect the cost of healthcare and special education as well as the higher costs of educating English learners and students from low-income backgrounds. In addition to funding, the law includes measures to encourage planning, accountability, and innovation.

Massachusetts becomes the #1 state in the country for academic achievement, with the highest average scores on the National Assessment of Education Progress (NAEP) in 4th grade math. 4th grade reading, 8th grade math, and 8th grade reading. The state leaped from 12th place in 8th grade math in 2000 and 5th place in 4th grade reading in 1998.

Education, the Massachusetts Supreme

Judicial Court rules against students

in 19 school districts who challenged

the state's foundation budget formula

as inadequate. The court finds that

the legislature's consistent increase

in funding and the state's measurable

all students constituted fulfillment of

its constitutional duty.

progress toward adequate education for

In Hancock v. Commissioner of

2020-

2022

Due to the COVID-19 pandemic, public schools across the Commonwealth switch to online-only instruction. Some schools and districts reopen for in-person learning in the fall of 2021, while others remained virtual until later in the 2021–2022 school year. The health and educational impacts of the pandemic fall disproportionately on low-income communities and communities of color. Results from the 2022 MCAS—which was paused in 2020 and shortened in 2021 due to the pandemic—show substantial declines in learning.

Congress creates the Elementary and Secondary School Emergency Relief Fund to support states and localities in confronting the pandemic's educational impact; this funding is supplemented by the Coronavirus Response and Relief Supplemental Appropriations Act and the American Rescue Plan of 2021.

2005

2003

2010

Legislature passes An Act Relative to the Achievement Gap, bringing additional funding to districts through the Obama administration's "Race to the Top" competitive grant program in exchange for additional reforms, including a charter school cap lift, strengthened accountability, in-district autonomous schools called Innovation schools. and the introduction of school district receivership in its current form as part of the state's accountability system.

Governance

Section 2

Governance

Overview

Local governments, the state, and the federal government all play roles in governing and funding school districts. Most educational decisions in Massachusetts are made at the local level. The state and federal governments provide funding, ensure that schools and districts meet standards through their accountability programs and intervene when necessary to protect students' civil and educational rights.

All three levels of government contribute to the funding of public schools. The federal portion of funding tends to be much smaller (statewide, about 3% of per pupil spending in the 2020–2021 school year according to DESE) than the combined state and local funding. Districts with higher levels of need tend to derive a greater share of their funding from the state and federal governments than districts with a larger tax base and/or more affluent population.

Local Governance

In Massachusetts, most traditional public schools are governed at the local level with varying degrees of state and federal oversight. Most traditional public school districts are coterminous with a single municipality, while some are regional school districts, created when residents of multiple towns decide to educate their students jointly.

For most districts, **governance** is divided between a **school committee** and a **superintendent**. Broadly, the school committee "establishes educational goals and policies for the schools in the district," approves the district's annual budget, and acts as the "employer' for collective bargaining purposes." The school committee is also required to fulfill state and federal mandates. School committee members are generally elected by the voters of the cities or towns encompassed by the district, with the exception of Boston, where they are appointed by the mayor.

Further, the school committee has the power to hire, manage, and fire the district's superintendent. The superintendent, in turn, is responsible for managing the district's day-to-day operations, including the hiring and supervision of key personnel.

At the individual school level, state law **stipulates** that each school establish a school site council. This council reviews the school budget, helps to develop school improvement plans, and takes on additional roles as granted by the local school committee. Members may include parents, guardians, teachers, and other stakeholders. At least half of the council must belong to the school community (meaning parents, teachers, students, and staff), parents must have parity with teachers, and the council should reflect the diversity of the school building and community.

One area of local governance is curriculum. Standards, or educational goals outlining what all Massachusetts students should know by completion of a given grade level, are set by the state. Districts, however, are responsible for choosing curriculum—meaning the lesson plans, topics of instruction, books, materials, and other resources used in the classroom. Decisions pertaining to these issues are governed at the local level; the state does not dictate curricular choices. The choice of which historical events to cover in class or which textbooks to use, for instance, are local matters.

State Role

The state government supports local governments by providing monetary aid, educational standards, accountability, and in some cases operational support.

The state legislature is empowered to make law on education policy, provided that state law must be consistent with the federal Every Student Succeeds Act and other binding federal laws. K–12 education policy laws are considered by the legislature's Joint Committee on Education, which chooses whether to report legislation favorably for consideration by the whole legislature. The Joint Committee on Education is additionally charged with considering bills on early education, while higher education bills are considered by the separate Joint Committee on Higher Education. The state budget, which determines the level of education funding to districts and programs, is developed in a monthslong process involving the Governor, House of Representatives, and Senate.

The Education Reform Act of 1993 established the Commonwealth's current approach to public education. That law created a program of progressive state aid to districts alongside standards and accountability, including statewide standardized testing in the form of the Massachusetts Comprehensive Assessment System (MCAS), to

ensure that all schools and districts provide their students with an adequate education. Subsequent updates, most notably in 2010 and 2019, expanded both the amount of money disbursed to districts and the powers conferred to the Department of Elementary and Secondary Education to support districts in narrowing achievement gaps.

The Commonwealth's state-level K–12 education policy is overseen by the Board of Elementary and Secondary Education, which approves standards, votes on charter school applications and renewals, decides when to approve state intervention in local districts, and hires the Commissioner of Elementary and Secondary Education.

The Board of Elementary and Secondary
Education (BESE) has 11 members. One is the
elected chair of the Massachusetts Student
Advisory Council, an elected body representing
students in all Massachusetts public schools.
Another is the Secretary of Education, who is a
member of the Governor's cabinet. The governor
appoints the remaining 9 members; one of the
9 may be appointed to a term coterminous with the
governor's tenure, while the other 8 are appointed
to 5-year terms.

Member(s)	Term	Selection
Secretary of Education	Governor's appointee	Cabinet-level government official; serves on BESE ex officio
Chair of the Student Advisory Council	Elected annually	Elected by Student Advisory Council
Labor representative	5 years*	Chosen by the governor from a list of three candidates provided by the State Labor Council, AFL-CIO
Business/Industry Representative	5 years*	Chosen by the governor, must be the representative of a business or industry
Parent representative	5 years*	Chosen by the governor from a list of three candidates provided by the Massachusetts Parent Teacher Association
Six additional members	5 years*	Freely appointed by the governor

*Unless this is the one member chosen by the governor for a term coterminous with the governor's tenure

The Commissioner of Elementary and Secondary Education attends Board meetings but is not a voting member.

The Secretary of Education, who is the governor's chief advisor on K–12 education, early education, and higher education, also leads the Executive Office of Education (EOE), a cabinet-level agency that collects and analyzes data from schools and districts, manages state education budget proposals, and may provide human resources assistance to districts or DESE. The Secretary must approve the Board's choice of Commissioner of Elementary and Secondary Education.

The Commissioner of Elementary and Secondary Education, in turn, leads the Department of Elementary and Secondary Education (DESE), which implements policy and supports districts. DESE is also responsible for ensuring that Massachusetts complies with the federal Every Student Succeeds Act (ESSA).

With regards to fulfilling its requirements under ESSA, Massachusetts placed focus for 2017–2022 on three main areas: strengthening the quality and breadth of curriculum, early grade literacy and middle grade mathematics achievement, and additional pathways to success following high school graduation.

To do this, DESE developed five **strategies** to focus its efforts: Strengthen standards, promote educator development, support social-emotional learning, turn around the lowest performing districts, and use technology and data to support student learning. As of December 2022, neither Massachusetts nor the federal Department of Education had announced a review or updates to the 2017–2022 plan. Some states, such as **Idaho**, have proposed changes to their 2017 plans.

DESE also recommends to districts a program of study for high school students, called MassCore, that is designed to lead to college and career readiness.

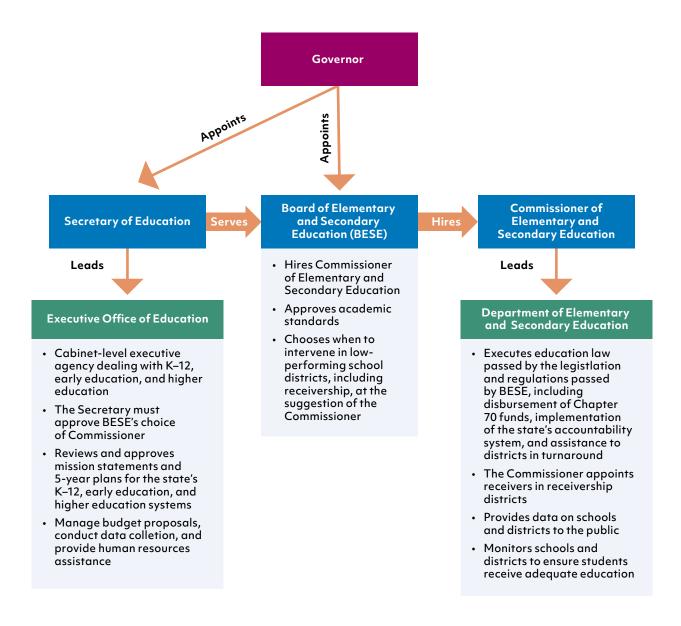
Additionally, the Department of Early Education and Care oversees state-level pre–K education policy and out-of-school-time programs, while the Department of Higher Education oversees higher education policy. Each of these departments has its own commissioner and board.

The Student Opportunity Act (SOA) of 2019 provided an opportunity for closer partnership between K–12 schools, which fall under the purview of the Department of Elementary and Secondary Education, and early education providers, which fall under the Department of Early Education and Care (EEC). That opportunity came as Jeff Riley,

Commissioner of Elementary and Secondary Education, encouraged districts to use SOA money to partner with private early education providers to provide free pre–K to district students. This model allows districts to braid Chapter 70 dollars with private funding streams in order to serve more pre–K students. It remains unclear how the COVID-19 pandemic may have impacted funding for this initiative; for example, it does not appear in EEC's Strategic Action Plan for 2020–2025, which was released in 2020 after the pandemic started.

At the local level, Holyoke has pursued a similar model using funding from a separate state grant: in a year round **program**, the Valley Opportunity Council manages pre–K classrooms in Holyoke school buildings, free of charge to parents. Please see the "Preschool" chapter in this primer for more information on how the state funds and governs preschool. Additionally, please see the "School Finance and the Chapter 70 Formula" section of this document for more information on the Student Opportunity Act, including on how the COVID-19 pandemic affected its implementation.

A high-level diagram of the roles of different government bodies in K–12 education policy is below.



Federal Role

The federal government plays a smaller role in K–12 education policy than either localities or the state, but it has played a significant role in both funding and policy since Congress passed the Elementary and Secondary Education Act in 1965. This law has been reauthorized under several different names, the most recent being the Every Student Succeeds Act (ESSA) of 2015. The agency responsible for implementing federal education policy is the Department of Education (DOE), a cabinet-level agency created in 1979.

Under ESSA, DOE plays roles in both **funding** public schools and **regulating** state education policy.

- **Direct funding:** The two largest federal funding programs for public schools are Title I, which directs about \$15 billion annually to schools with large populations of students from lowincome backgrounds, and the Individuals with Disabilities Education Act (IDEA), which provides about \$12 billion annually in special education grants to states. In both cases, the funding flows directly from DOE to states, which then distribute the funding to schools or districts. There are also smaller federal funding programs targeting various subgroups and programs, which can be found in DOE's budget.
- Regulation and civil rights protection: Under ESSA, the federal DOE also plays an oversight and regulatory role. ESSA requires states to establish high academic standards; conduct standardized assessments based on these standards; share information about these assessments and their results with families, students, and communities; and create accountability and support systems to help underperforming schools, schools with low-performing subgroups, and schools with low graduation rates. During the COVID-19 pandemic, the federal government allowed states to apply for waivers to ESSA's accountability requirements, provided the state presented a plan for how the waiver would serve students' needs and allow for continued progress in closing achievement gaps.

- Beyond ESSA, DOE can also issue guidance and regulations aimed at protecting students' civil rights, as well as parent rights. It enforces the Individuals with Disabilities Education Act (IDEA), which guarantees that students with disabilities receive an adequate public education tailored to their needs. As with all federal agencies, DOE may repeal its own guidelines and regulations. The Obama administration, for example, issued guidelines aimed at diminishing racial disparities in school discipline, which the Trump administration later rescinded.
- Competitive grant programs: While the federal DOE has limited authority to mandate policy change in the states, it has used competitive grant programs as a means of encouraging favored policies. Rather than requiring states to adopt a particular policy, these programs incentivize the optional change. An example is the Obama administration's Race to the Top program, which awarded over \$4 billion to states for proposals including increased charter school seats, state interventions in struggling schools and districts, and increased use of data in making education decisions.

Parent/Guardian Rights

Parents and guardians have a number of rights and powers under Massachusetts law. Most fundamentally, parents have an ultimate right to choose where and how their children are educated, though their school choices are generally constrained by geographic boundaries established by their local district. Parents may choose among options including the traditional public school system, public charter schools, vocational-technical schools, regional schools, alternative education models, private schools, and homeschooling. If they choose the traditional public schools, they generally must send their children to schools to which they are zoned, though the state's school choice program (discussed in its own section below) allows some students to attend traditional public schools in districts other than the one in which they live.

Some parent rights are uniform across the Commonwealth, such as parents' rights to require alterations in a child's Individualized Education Program. Other rights, such as when parents may enter school buildings, vary by district as a matter of local control.

Parent involvement in educational decision-making and practice has documented benefits for students, but barriers to access mean that white, middle- and upper-income parents are most likely to be engaged. A 2010 study found that perceived barriers of resources were less influential to a parent's decision to become more involved than the extent to which a parent felt welcomed and invited by their child's school or teacher.

At the state level, the Parent and Community
Education and Involvement Advisory
Council advises the Commissioner of
Elementary and Secondary Education and
the Board of Elementary and Secondary Education
on parent/guardian outreach and involvement.
Furthermore, as noted above, at least one member
of the Board of Elementary and Secondary
Education must serve as a parent representative,
chosen from a list provided to the governor by
the Massachusetts Parent Teacher Association.

The 2019 Student Opportunity Act added another component of parent/guardian involvement. Along with the law's provision that districts must present three-year spending plans to the Department of Elementary and Secondary Education, districts must collect "input and recommendations from parents and other relevant community stakeholders" in crafting these plans.

Appendix: Current Office Holders

As of January 2023, the offices described above are held by the following individuals.

Executive Officers:	
Governor	Maura Healey (D)
Secretary of Education	Dr. Patrick Tutwiler
Commissioner of Elementary And Secondary Education	Jeffrey C. Riley

Board of education		
Position	Name	Term ends
Secretary of education	Dr. Patrick Tutwiler (Andover)	Governor's appointee
Chair of student advisory council	Eric Plankey (Westford Academy)	Elected annually
Labor representative	Darlene Lombos (Boston). Executive Secretary-Treasurer of the Greater Boston Labor Council.	2025
Business/industry representative	Katherine Craven (Brookline), chair. Chief Administrative Officer, Babson College	2024
Parent representative	Mary Ann Stewart (Lexington). MA Parent Teacher Association board member	2024
Freely-appointed members (6)	Matt Hills (Newton), vice chair. Former chair, Newton School Committee	2024
	Michael Moriarty (Holyoke). Executive Director, OneHolyoke Community Development Corporation	2025
	Paymon Rouhanifard (Brookline). CEO and co-founder, Propel America; former superintendent, Camden (NJ) City School District	2024
	Dr. Martin West (Newton). Professor of education at the Harvard Graduate School of Education, faculty research fellow at the National Bureau of Economic Research, and editor-in-chief of Education Next	2027
	Tricia Canavan (South Hardley), CEO of Tech Foundry	2027
	Farzana Mohamed (Newton), author and management consultant, former chief of staff and director of strategic planning at Beth Israel Deaconess Hospital	2027

Finance and Accountability

Section 3.A

School Finance and the Chapter 70 Formula

Overview

Massachusetts' school funding system responds to the state Constitution's guarantee of an adequate education to all students. State and local funds constitute the vast majority of education funding, while the federal government tends to provide a relatively small proportion to each district. The state determines the funding level required for each district to meet this Constitutional duty, and it then helps districts to reach that level using state aid to

supplement local appropriations. It determines each district's amount of state aid through a mechanism called the "Chapter 70 formula," detailed below. The formula is designed to provide greater amounts of funding to districts with higher levels of need, but all districts receive some state funding.

Since 1993, the state has provided \$105 billion to districts through the Chapter 70 formula.

How it Works: The Chapter 70 Formula

The Chapter 70 formula operates under the requirement that districts spend enough per student to provide an adequate education. The state helps districts do so where the district cannot afford the requisite budget on its own. Named for its statutory location in the Massachusetts General Laws, the formula was established through the 1993 Education Reform Act and most recently updated through the 2019 Student Opportunity Act.

The state determines the amount of aid each district will receive in a given year using the following process:

1. The state calculates the amount of money a district would have to spend in order to provide an adequate education to its students; this is called the **Foundation Budget**. It is rendered by multiplying the district's number of students in each grade and demographic category (e.g., students with disabilities or English learners) by multipliers specific to that demographic group, and then by dollar amounts in various functional categories (like operations and maintenance).

The 2019 Student Opportunity Act (SOA) updated the Chapter 70 formula by increasing the assumed costs of healthcare and of educating students with disabilities, English learners, and students from low-income backgrounds to reflect actual increased costs since 1993. When the SOA was adopted in 2019, it was forecasted to increase Chapter 70 funding to districts by \$1.4 billion (before inflation) by fiscal year 2027.

- a. The funding increase was paused in fiscal year 2021 due to the pandemic, but the legislature subsequently recalculated the increases to complete them in six years, thus staying on target for fiscal year 2027. As intended, lower-income communities, such as Gateway Cities, have seen some of the largest increases in aid.
- 2. The state determines how much of the Foundation Budget a given district can pay based on the municipality's aggregate property values and aggregate personal income. This, the Local Contribution, constitutes a greater proportion of the Foundation Budget in high-income communities than in low-income communities. The state provides Chapter 70 aid to districts in order to make up the difference between the Local Contribution and the Foundation Budget.
- **3.** That being said, there is a minimum amount of Chapter 70 aid: all districts must receive at least 17.5% of their Foundation Budget in state aid.
- 4. Districts are also free to spend above the Foundation Budget. Even when districts spend more than their total Foundation Budget, they still receive the 17.5% minimum aid from the state.

When the SOA was adopted in 2019, it was forecasted to increase Chapter 70 funding to districts by \$1.4 billion.

The following graphic from the Massachusetts Budget and Policy Center demonstrates how the Chapter 70 formula applies to two districts, Watertown and Chelsea.

Chapter 70 Funding for Two Sample Districts

Per pupil spending by revenue source, FY 2019



Chelsea Watertown

Charter schools also receive funding through the Chapter 70 program, with funding associated with a given student flowing from the student's sending district to his/her charter school. This funding mechanism is consistent with the state's general principle that funding is based on, and follows, students, not districts. For a more in-depth discussion of charter schools and charter school

finance, please see the "charter public schools" section below.

The state disbursed over \$5.5 billion in Chapter 70 funds to school districts in FY22. Since 1993, Chapter 70 aid has increased 327%. This means that FY22's Chapter 70 allocation was nearly \$3 billion more than would have been necessary to account for inflation since 1993.

Chapter 70 Funding Over Time

Compared to inflation



Crucially, the state decides each district's minimum funding level and its own contribution based on need alone. In most districts, local property taxes constitute the bulk of school funding; in districts with smaller property tax bases or greater levels of need, the state may provide the largest share of funding. Most state funding to districts comes

through the Chapter 70 formula, outlined above. Other sources of state funding to districts include, but are not limited to, circuit breaker funding for special education (discussed below); grants for districts to implement specific programs, such as the social/emotional learning grants discussed below; transitional aid to districts when students leave to

attend charter schools; and Massachusetts School Building Authority funding (discussed below).

School finance in Massachusetts is governed by the principle, inscribed in the state constitution, that each student is entitled to an adequate education. In 1993, the state's Supreme Judicial Court ruled in McDuffy v. Secretary of the Executive Office of

Education that this constitutional provision imparts on the state government a duty to ensure sufficient district spending on public education. Each district must craft a budget that fulfills this requirement, and the state must commit to aiding districts when they cannot provide sufficient funding on their own.

National Context

In San Antonio Independent School District v. Rodriguez (1973), the U.S. Supreme Court ruled that there is no federal Constitutional right to equal educational opportunity. In the *Serrano* cases, especially Serrano II (1976), the California Supreme Court held that the California Constitution protects students' right to education despite San Antonio's rejection of a similar protection in the U.S. Constitution. The Kentucky Supreme Court ruled in Rose v. Council for Better Education that Kentucky's constitutional protections for quality education required equitable funding and statelevel measures to ensure equity. In the Abbott decisions, notably Abbott IV (1997) and Abbott V (1998), the New Jersey Supreme Court held that the state constitution's protection for "thorough and efficient education" required alterations to the state's funding formula and rigorous intervention in many districts.

Massachusetts' school finance system is progressive, meaning that it directs more money to high-need districts than districts of lower need. Not all states have similar systems, nor do all state constitutions require adequate public education for all students and concomitant funding.

Some states, like Alabama, distribute state funding solely based on the number of students in a given district. Others, like Maine, have no constitutional requirement for state funding to districts of high need, but nonetheless have established such systems through legislation.

More Information

For more on school finance and its history in Massachusetts:

- "Chapter 70 Program." Massachusetts
 Department of Elementary and Secondary
 Education. Website.
- "The State Constitutional Mandate for Education: The McDuffy and Hancock Decisions." Massachusetts Department of Elementary and Secondary Education" Massachusetts Department of Elementary and Secondary Education.
- "School Funding Reality: A Bargain Not Kept." Massachusetts Business Alliance for Education, 2010.

For more on school funding in each state constitution:

• "50-State Review: Constitutional obligations for public education." Education Commission of the states. March 2016.

For more on finance reforms and their impact on the achievement gap:

 Lafortune, Julien, Jesse Rothstein, and Diane Whitmore Schanzenbach. "School Finance Reform and the Distribution of Student Achievement." National Bureau of Economic Research. 2016.

Section 3.B

Massachusetts School Building Authority

Overview

The Massachusetts School Building Authority (MSBA) is a quasi-independent government authority that provides monetary assistance to cities, towns, and regional school districts seeking to make capital improvements to existing buildings and to construct new buildings. Since the legislature created it in 2004, the MSBA has disbursed over \$16.1 billion in payments for approved projects through 2022.

The MSBA operates independently of the Department of Elementary and Secondary Education. It is neither housed within the Department nor responsible to it. As a quasi-independent authority, it is governed by a Board of Directors; the chair of the Board is the Treasurer of the Commonwealth. The board meets six times a year to approve or deny projects.

According to Massachusetts General Laws:

"The authority shall consist of the state treasurer, who shall serve as chairperson, the secretary of administration and finance, the commissioner of education, and 4 additional members appointed by the state treasurer, [two] of whom shall have practical experience in educational facilities planning, school building construction, or architecture and school design, and [two] of whom shall be persons in the field of education with demonstrated knowledge of Massachusetts curriculum frameworks and other relevant federal and state educational standards, each of whom shall serve a term of [two] years; but, a person appointed to fill a vacancy shall serve only for the unexpired term."

The MSBA has a steady revenue stream of 1% of revenue generated from the state's 6.25% sales tax.

Working with MSBA

Towns, cities, and districts seeking MSBA funding for a project must submit a Statement of Interest demonstrating the extent to which building deficiencies limit their ability to provide high-quality education. SOIs can be submitted either to the Accelerated Repair Program (for time-sensitive issues like roof, window, or boiler replacement) or to the Core Program for larger projects.

Following submission of the SOI, several steps must be completed in order to secure MSBA funding (a more detailed process flow chart from the MSBA can be found on its website).

First, the MSBA Board reviews the SOI and votes to accept the municipality/district into an Eligibility Period, which lasts up to 270 days, and during which the municipality/district must complete several requirements. The most notable is a local vote to secure funding for the project; the MSBA requires this assurance of local funding before beginning the process toward disbursing its payments.

For districts that complete the requirements of the Eligibility Period, the Board then votes to invite the district into the Feasibility Study phase, at which point the district must provide further project plans and a schematic design. After this point, another local vote is required to secure funding. The MSBA will then vote to award funds or not. If the MSBA approves a project, it will sign a contract with the municipality or regional district in question.

More Information

On the Massachusetts School Building Authority

 "Massachusetts School Building Authority." Massachusetts School Building Authority. Website

Section 4

Accountability

Overview

The education accountability system in Massachusetts works alongside the Commonwealth's progressive school funding model to ensure that every student receives a quality education as guaranteed under the state Constitution. Like the Chapter 70 formula, it was established by the 1993 Education Reform Act. Since then, Massachusetts has used a standardized assessment, the Massachusetts Comprehensive

Assessment System (MCAS), among other measures to assess school quality. Based on these measures, the accountability system allows for increasing levels of state intervention in schools and districts facing persistent problems in serving their students.

Districts are held accountable for both their results and their plans on how to use state funding to narrow achievement gaps.

Standards-Based Assessments

Massachusetts' accountability system rests upon the state's education **standards**, required by the Education Reform Act of 1993. The standards delineate expectations of what students should learn by the end of each grade; districts develop curricula aligned with these standards, and teachers develop lesson plans accordingly.

Massachusetts' standardized assessment, the MCAS, is crafted based on these standards, and

MCAS results are a key data point in the state's accountability system. A more in-depth discussion of MCAS can be found in the next section of this document.

MCAS tests are developed to measure student competency based on the Commonwealth's academic standards rather than on the specific curricula selected by districts and aligned to those standards.

Collecting Accountability Data

Massachusetts uses a broad range of data points to determine school quality. These data points, called indicators, are informed by requirements in state and federal law.

Indicators include:

- "Achievement," meaning student performance on the MCAS standardized assessment
- "Growth," or student improvement on the MCAS
- High school completion, including four-year graduation rate, five-year graduation rate, and dropout rate
- English language proficiency (for students whose first language is not English)
- "Additional indicators," including chronic absenteeism and percentage of students taking advanced coursework

These indicators are reported both for schools and districts as a whole and for a school's or district's lowest performing students. Results must also be reported for 11 subgroups: American Indian or Alaska Native; Asian; African American or Black; Hispanic or Latino; Multi-race, non-Hispanic or Latino; Native Hawaiian or Pacific Islander; White; economically disadvantaged students; students with disabilities; current and former English learners (ELs); and high needs students (an unduplicated count of students who are economically disadvantaged, students with disabilities, and/or ELs and former ELs). In order to report data for a subgroup, there must be results for at least 20 students.

When evaluating the performance of schools and districts, there is an active debate nationally and in Massachusetts on the appropriate ratio of growth to achievement in student assessment. Achievement measures all students, and thus all schools, by common benchmarks, and, consequently, achievement scores are comparable across districts. Growth, on the other hand, measures improvement over past results. Policymakers and academics entertain a wide range of views on how much states

and districts should emphasize one or the other, as outlined in an American Institutes for Research paper describing the debate and arguments for both approaches.

In its accountability system, Massachusetts uses a 3-to-1 ratio of achievement to growth,

meaning that student scores on MCAS are weighed more heavily than the extent of student improvement. In so doing, the Commonwealth has made an intentional choice to emphasize achievement to ensure that all students are expected to meet the same high level of educational excellence.

Growth, in measuring a given student's level of improvement over time, can be useful in assessing an intervention's effectiveness at the level of an individual student; achievement, in measuring a student's level of competency in a given subject, can be assessed comparatively, telling policymakers how academic results between schools and districts differ. Because of this comparative property, Massachusetts' emphasis on achievement allows the state to compare schools and districts across the Commonwealth through an equity lens.

Assessment of School and District Quality

Based on the accountability indicators, the Department of Elementary and Secondary Education calculates two scores for each public school and district: a normative component, which is a percentile showing where a school or district stands on accountability indicators compared to all schools or districts in the state, and a criterion-referenced component, which measures a school's or district's progress toward meeting its own goals for improvement.

Together, these scores inform the school's or district's categorization in the state's accountability system. There are seven categories in descending order, as seen in the graphic below. (The highest-level category, "Schools of Recognition," is available only to schools, not to districts.) In spring of 2020, the Commissioner of Elementary and Secondary Education announced that DESE would not assign

new accountability levels to districts in the 2019–2020 academic year due to the effects of the COVID-19 pandemic; DESE also declined to assign accountability levels in the 2020–2021 and 2021–2022 school years.

Schools and districts in the bottom two categories, that is, those "requiring assistance or intervention," are required to create turnaround plans that "identify priority areas for turnaround and select strategic initiatives at both the school and district level to address the priority areas." The plan must also include clear benchmarks for student achievement and other indicators toward achieving Measurable Annual Goals (MAGs).

Schools and districts requiring "Broad/ comprehensive support" must create accelerated, three-year turnaround plans. They are designated

on the basis of continued poor performance on the state's standardized assessment and lack of improvement. The schools and districts that struggle most persistently, also known as "chronically underperforming," are placed into receivership.

Schools without required assistance or intervention (approximately 85%)			Schools requiring assistance or intervention (approximately 15%)			
Schools of recognition	Meeting or exceeding targets	Substantial progress toward targets	Moderage progress toward targets	Limited or no progress toward targets	Focused/ targeted support	Broad/ comprehensive support
Schools demonstrating high achievement, significant improvement, or high growth	Criterion- referenced target percentage 75-100	Criterion- referenced target percentage 50-74	Criterion- referenced target percentage 25-49	Criterion- referenced target percentage 0-24	Schools with percentiles 1–10 not already identified for broad/ comprehensive support Schools with low graduation rate Schools with slow performing subgroups Schools with low participation	Underperfoming schools Chronically underperforming schools

Districts without required assistance or intervention		Districts requiring assistance or intervention			
Meeting or exceeding targets	Substantial progress towards targets	Moderate progress towards targets	Limited or no progress towards targets	Focused/ targeted support	Broad/ comprehensive support
Criterion- referenced target percentage 75–100	Criterion- referenced target percentage 50-74	Criterion- referenced target percentage 25-49	Criterion-referenced target percentage 0-24	Districts with low graduation rate Districts with low participation	 Underperforming districts Chronically underperforming districts

Source: "Summary of Massachusetts' District and School Accountability System," Massachusetts Department of Elementary and Secondary Education, 2022.

The Department of Elementary and Secondary Education classifies districts according to the above metrics by using data supplied by districts.

In addition, the Office of District Reviews and Monitoring (ODRM) uses DESE's District Standards and Indicators to perform more comprehensive reviews of school districts. During the course of a review, ODRM assesses the accuracy of district reports, inspects schools to "evaluate efforts to improve and support the quality of instruction and administration," reviews the district's MCAS success plan and its implementation of any MCAS-

related grants, evaluates alignment of curriculum and professional development programs with state guidelines, reviews the progress of overall student achievement, and assesses overall district performance. After these reports are presented to the Board of Elementary and Secondary Education, the Commissioner of Elementary and Secondary Education issues recommendations to districts.

ODRM must perform at least 40 such reviews per year, of which at least 75% must be of districts whose levels of student achievement are low.

Accountability in the Student Opportunity Act

On November 26, 2019, Governor Charlie Baker signed the Student Opportunity Act (SOA) into law, updating the formula by which the state calculates Chapter 70 aid to school districts and introducing accountability measures aligned with district spending priorities, including up-front planning requirements and reporting on results.

The law's chief accountability measure is a requirement that all districts submit to the Department of Elementary and Secondary Education three-year plans detailing how they will use state aid to narrow achievement

gaps. These plans must stipulate evidence-based programs that districts will use, or explain the lack thereof. In crafting the plans, districts must engage community stakeholders, including parents. The Commissioner of Elementary and Secondary Education is empowered to reject the plans or request alterations.

Districts' initial three-year spending plan was due to DESE in spring of 2020. Due to the COVID-19 pandemic, DESE postponed this requirement multiple times, eventually requiring that plans be submitted before January 1, 2021. The submitted plans can be found at the "Student Opportunity Act" page on DESE's website. After reviewing the plans submitted in 2021, DESE required many districts to resubmit their plans with either required or optional changes. These changes were meant to ensure that SOA funding will effectively close gaps through evidence-based strategies.

In addition to district-level plans, the SOA requires DESE to set state-level benchmarks for academic performance and the closing of opportunity gaps, as well as district-level targets consistent with these state-level goals. As of December 2022, the state had not set these benchmarks.

More Information

On Massachusetts' education accountability system:

• "Accountability and Assistance System Overview." Massachusetts Department of Elementary and Secondary Education. Website.

On achievement/proficiency and growth:

 Lachlan-Haché, Lisa and Marina Castro.
 "Proficiency or Growth? An Exploration of Two Approaches for Writing Student Learning Targets." American Institutes for Research. April 2015. Study.

Section 4.A

Massachusetts Comprehensive Assessment System (MCAS)

Overview

The Massachusetts Comprehensive Assessment System (MCAS) is Massachusetts' annual

standardized test. It consists of standardized tests in the following grades and subjects, **current** as of 2022:

Grade	Subjects
3	English language arts (ELA), mathematics
4	ELA, math
5	ELA, math, science and tech/engineering
6	ELA, math
7	ELA, math
8	ELA, math, science and tech/engineering
10	ELA, math
High school (year not specified, to be taken in year when taking the appropriate class)	Biology, introductory physics, chemistry (will be discontinued by 2024; only students in the classes of 2025 and earlier may take this test), technology/engineering (will be discontinued by 2024; only students in the classes of 2025 and earlier may take this test)

English learners are additionally required to take an annual English proficiency test called **ACCESS** for ELLS

As outlined above, results from the MCAS are used in the school and district accountability system. Students must also pass the 10th-grade MCAS tests in ELA, math, and a subject within science and technology/engineering in order to receive a

diploma from a Massachusetts high school, though there are alternative assessments available in some cases. A student with cognitive disabilities that would make a timed test especially challenging, for example, may be assessed based on a portfolio of work collected by the student and his/her teacher.

DESE altered some graduation requirements for cohorts affected by the COVID-19 pandemic. For a detailed discussion of these changes, please see the

section of this document, "The COVID-19 Pandemic and the K–12 Response."

The most recent results on the MCAS, by grade, subject, district, and school, are published by the Department of Elementary and Secondary Education and by the Boston Globe (2022 results).

History

Massachusetts began administering MCAS tests in 1998, five years after the Education Reform Act of 1993. They were first used as a graduation requirement with the class of 2003.

Between 1998 and 2014, all districts administered MCAS. There have been some additions over time in the subjects tested—ELA and mathematics have always been tested, science subjects are more recent additions, and the state piloted a history test that has not been adopted.

In 2014, Massachusetts began transitioning from the MCAS to PARCC, a test that measured more than basic skills. PARCC (Partnership for Assessment of Readiness for College and Careers) was designed to assess postsecondary readiness based on the Common Core, a nationally-developed set of college-and career-ready standards in mathematics and English language arts. The then-Commissioner of Elementary and Secondary Education in Massachusetts, Mitchell Chester, chaired the multistate consortium that developed the PARCC tests.

In 2015, however, the Massachusetts Board of Elementary and Secondary Education decided to cease transitioning to PARCC amid concerns that the new test was less rigorous than the MCAS. Instead, the state decided to develop a new test, a hybrid of the MCAS and PARCC, called "Next Generation MCAS" or "MCAS 2.0." Whereas the original MCAS was a paper-and-pencil test, the "Next Generation" MCAS is computer-based.

By 2019, all Massachusetts schools and districts transitioned to the Next Generation MCAS for ELA and math; for science and technology/engineering subjects, the biology and introductory physics test transitioned to Next Generation MCAS in 2022, while the state will phase out the legacy Chemistry and Technology/Engineering tests by 2024. In general, studies have concluded that

PARCC is predictive of college and career success, while results for MCAS have been mixed. A study by researchers at Mathematica commissioned by the Massachusetts Department of Elementary and Secondary Education in 2015 found that both PARCC and the MCAS were predictive of college and career success. However, a 2015 study released by Massachusetts Business Alliance for Education and the Center for Assessment found that PARCC serves as "a good indicator of college and career readiness," but that the first-generation MCAS does not.

A 2020 study completed through a partnership among Harvard University, Brown University, and the Massachusetts Department of Elementary and Secondary found that a student's MCAS performance is predictive of his/her probability of graduating high school, post-secondary education attainment, and earnings at age 30. While the study notes that "gaps in attainments exist even for students with the same MCAS scores," it nonetheless finds that "differences in earnings are much smaller when we compare students with the same MCAS score."

Between the 1998 release of the first MCAS results and 2019, MCAS results showed substantial statewide improvement in core subject competence over time. Between 1998 and 2018, the percentage of Massachusetts 10th graders proficient in mathematics rose from 24% to 78%. The percentage proficient in English language arts rose from 38% to 91%. Gains were dramatic across subgroups, though progress grew slower in the mid-2010s and achievement gaps remained persistent.

Between 2019 and 2022, MCAS scores <u>declined</u> in all three tested subject areas: math, ELA, and science.

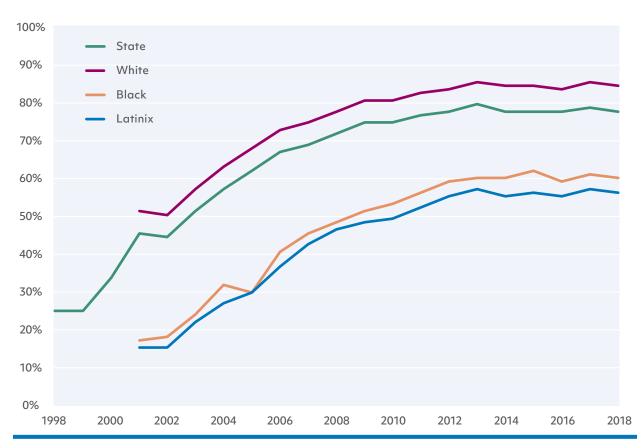
Between 2019 and 2022, MCAS scores declined in all three tested subject areas: math, ELA, and science. Declines have been especially steep in ELA for grades three through five, which may point to growing problems with early literacy. Declines have been especially steep in ELA for grades three

through five, which may point to growing problems with early literacy.

The COVID-19 pandemic, and the subsequent disruption of in-school learning, likely played a substantial role in driving these declines (see Section 27 of this document, "The Covid-19 Pandemic and the K-12 Response," for more about the pandemic's impacts on K-12 education.) At the same time, they followed a period of stagnation through much of the 2010s and coincided with a drop in Massachusetts' NAEP scores that began with a decline from 2017 to 2019, before the pandemic began.

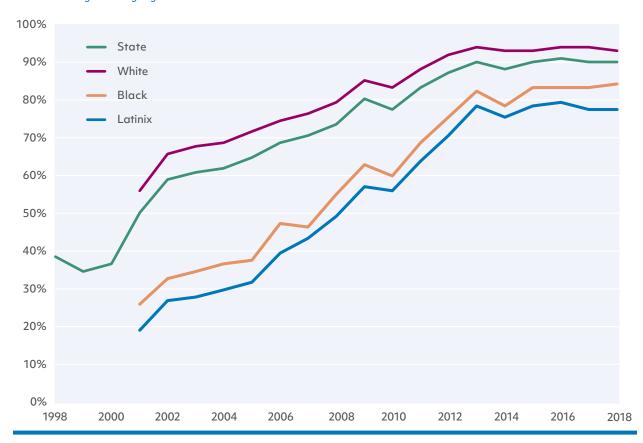
Percent Proficient or Better

10th Grade Mathematics



Percent Proficient or Advanced

10th Grade English Language Arts



We do not use data from the 2019 MCAS or later in the above figures and charts because Massachusetts' high schools transitioned to the MCAS 2.0 in

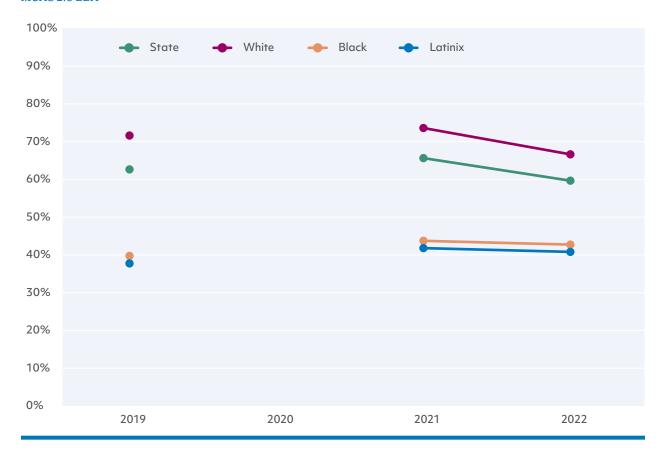
2019, meaning that 2019 data is not comparable to earlier data. From 2019 forward (excluding 2020, in which MCAS was not administered), Grade 10

students switched to the new MCAS 2.0 test. The below graphs show the trends in the percentage of

students who scored in the "meeting expectations" or "exceeding expectations" range on the new test.

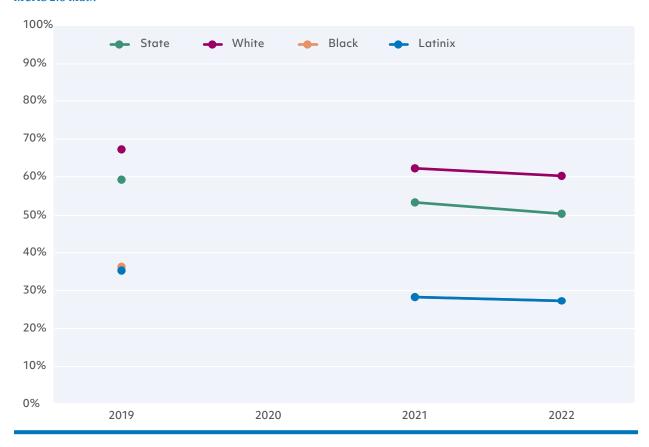
Percent Meeting or Exceeding Expectation

MCAS 2.0 ELA



Percent Meeting or Exceeding Expectation

MCAS 2.0 Math



Please note that in 2021 and 2022, the percentages meeting and exceeding expectations in math were the same for Black and Latinx students. The two trendlines are therefore superimposed on each other above. The source for all MCAS data in this section is DESE's School and District Profiles website.

Section 4.B

State Intervention: Turnaround and Receivership

Overview

Massachusetts law allows the state to intervene in schools and districts that persistently struggle to meet students' needs. In Massachusetts, "turnaround" refers to the process by which the state government intervenes in underperforming schools and districts to yield improvements, and "receivership" refers to a decision by the Board of Elementary and Secondary Education to take control of a school or district deemed "chronically

underperforming" and in need of state intervention to begin a turnaround. While schools have entered and exited turnaround status since Massachusetts authorized the practice, only three districts have come under receivership as defined in the 2010 Act Relative to the Achievement Gap: Lawrence (in 2011), Holyoke (in 2015), and Southbridge (in 2016). All three districts are under state receivership as of 2022.

How it Works

In 2010, the Massachusetts legislature passed a bill titled "An Act Relative to the Achievement Gap." The law paired updated standards and accountability for schools and districts with an influx of revenue from the Obama administration's Race to the Top competitive grant program. The bill also included an increase to the Commonwealth's charter school cap in certain low-performing districts.

A key reform in the law was the turnaround process for underperforming schools and districts. Under this process, schools and districts deemed underperforming based on successive years of low student achievement are required to develop a turnaround plan with the participation of a local stakeholder group and the state. The plan must include steps to improve student achievement, narrow achievement gaps, address any financial issues, and improve both student services and workforce development. It must also include measurable, annual goals. Under a

district turnaround plan, the superintendent is granted increased flexibility and may implement turnaround measures including altering the curriculum, expanding the school day or year, or changing the staff hiring process, though collective bargaining remains in force. Turnaround plans may only remain in force for up to three years and are reviewed at least annually by the Commissioner.

Paired with the turnaround process is state receivership for Massachusetts' most persistently underperforming schools and districts. Under this process, the Commissioner of Elementary and Secondary Education is empowered to recommend state receivership for any school or district in the state's bottom 10% by academic performance. The school or district must be both low performing and, according to the Department of Elementary and Secondary Education, "not showing signs of substantial improvement over time." If the Board places a school or district into receivership following

the Commissioner's recommendation, the local school committee is relieved of control, and a state-appointed receiver takes the helm.

Receivership offers schools and districts several flexibilities, autonomies, and authorities not generally available to them. The receiver can revise scheduling, curriculum, and finance, alter or abrogate existing collective bargaining agreements, and require staff or leadership to re-apply for their positions.

Labor/management relations under receivership differ significantly from usual operations. Under

receivership, the receiver is empowered to abridge any previous collectively bargained provisions and require a new contract with bargaining units. Receivers may require all staff members to reapply for their positions, though receivership in Massachusetts has not entailed mass layoffs of teachers. Collective bargaining remains in force under the new contract, and the receiver is required to convene and collect recommendations from a local stakeholders group that includes the local teachers union.

State of Research

While three districts have been placed into receivership, only one—Lawrence—has thus far been the focus of a significant amount of research. That research shows highly positive results.

Over the course of receivership, Lawrence's graduation rate has risen over 25 percentage points. Its MCAS scores have risen substantially, and it has seen a marked decrease in the number of students attending low-quality schools.

On a national level, research on the effectiveness of state takeovers is mixed. A 2002 study by Kenneth Wong and Francis Shen, for example, found a great deal of variance in the effectiveness of state takeovers nationwide, though they concluded that "state takeovers may [...] be able to produce positive achievement gains [...] after a period of adjustment." A 2021 paper by Beth Schueler and Joshua Bleiberg similarly found no consistent effect of state takeovers, instead concluding that the practice's success or failure is heavily dependent on local context and operational effectiveness. "Leaders," the researchers wrote, "should be cautious about using takeover without considering local context and a better understanding of why some takeovers are more effective than others." Schueler has previously written about the successes of Massachusetts' state receivership in Lawrence.

Over the course of receivership, Lawrence's graduation rate has risen over 25 percentage points.

More information

More on the success of receivership in Lawrence

- Griffin, John. Money, Mediocrity, and Making Change—A Tale of Two Cities: Comparing Progress in Boston and Lawrence. Education Reform Now Advocacy. 2019.
- Schueler, Beth. "A Third Way: The Politics of School District Takeover and Turnaround in Lawrence, Massachusetts." Educational Administration Quarterly. 2 July 2018.

Desegregation, Demographics, and Diversity

Desegregation Efforts

Overview

Segregation manifests in school systems in many ways: wide-ranging disparities in resources and opportunity, lower education quality in neighborhoods with high populations of low-income students and families, and a lack of representation in teachers and staff. Many states and districts are actively pursuing strategies to desegregate schools

and the neighborhoods from which they draw students. In Massachusetts, the most substantial desegregation program is the Metropolitan Council for Education Opportunity, or METCO, which transports students from Boston and Springfield to schools in the suburbs.

In Massachusetts

Massachusetts is divided into over **400 public school districts**, including traditional districts and charter public schools. Most of these districts align with municipal borders. Combined with Massachusetts' history of residential segregation and the segregating nature of **school district borders**, this patchwork of districts has contributed to a long history of segregation by race and socioeconomic status in the Commonwealth's schools. Massachusetts' continued struggle with school segregation reflects both policy choices made even in the present day and the legacy of our political geography's municipal boundaries.

In 1965, the Massachusetts Board of Education released a report on the harm of racial disparities on students in the Commonwealth's public schools. Later that year, the state legislature passed the Racial Imbalance Act, which made it illegal for the state's schools to segregate by race. Yet, by many measures, school segregation is more prevalent five decades later.

Busing has been a major topic in the movement for integration, including the case of Morgan v. Hennigan where the NAACP joined parents in a

federal lawsuit against the Boston School Committee, charging that the School Committee was violating students' constitutional rights by preserving de facto school segregation and underfunding majority-black schools. The court implemented a busing plan that allowed black students to enroll in schools outside of their neighborhood, which often received more funding and had better academic results.

Today, METCO is the main vehicle for school desegregation in Massachusetts. It is a

voluntary program by which suburban districts agree to enroll students from Boston and Springfield. The voluntary nature of the program means that its scope is limited both by the number of participating districts and the number of students each district chooses to accept. As of 2022, 33 suburban districts participate, accepting anywhere from 26 to 420 students.

METCO is funded through its own line-item in the state budget, as well as Chapter 70 money following each child. Districts are financially responsible for providing the same level of services to METCO students that they provide to students who reside in the district, including academics, social/emotional

supports, meals, and counseling. Studies have shown that METCO positively impacts student achievement, and some advocates have called for expanding the program.

Other desegregation efforts in the Commonwealth have been largely local in nature. A notable example is Cambridge's "Controlled Choice Plan," which

assigns students to schools in the city based on both the family's stated choice among all Cambridge schools and the goal of achieving socioeconomic balance in each school. This plan has been used as a model by other districts, including Lowell.

National Context

Since the 1954 Brown v. Board of Education case, the Supreme Court has decided a number of cases that have limited the federal government's role—and, in some cases, even local district's voluntary actions—in curbing segregation.

In 1971, the Court ruled in Swann v. Charlotte-Mecklenburg that busing was an appropriate strategy to pursue racial integration in segregated districts, even when that segregation flowed only from residential patterns (as opposed to the intentional segregation of students into separate schools by race). The Court then limited the potential role of busing in its 1974 decision, Milliken v. Bradley, which ruled that inter-district busing could not be forced

upon a given district unless that district could be shown to have committed a constitutional violation. In the 2007 decision, *Parents Involved in Community Schools v. Seattle School District*, the Court struck down Seattle's school assignment system, ruling that it could not take a student's race into account when deciding that student's school assignment.

65 years after *Brown v. Board*, segregation persists across the country. Black students will most likely **attend** a school where 49% of others are also black; Latino students, on average, attend a school where 57% of their peers share their race. These patterns persist not only for black and Latino students but with low-income students as well.

State of Research

Research shows that increasing diversity and integrating schools is not only beneficial for students of low-income or racial minority, but also for their peers. A 2019 report from The Century Foundation, reviewing recent research on school desegregation and racially diverse classrooms, found that students in integrated schools tend to have higher academic achievement than their peers in more segregated schools and attend college at higher rates. The report also finds that more integrated schools tend to have less drastic achievement gaps and more equitable access to resources.

Research tends to support the idea that desegregation efforts work best when they address the underlying issue of inequitable access to resources and high-quality education generally.

Studying opportunity levels in Seattle, a team of researchers found that housing patterns are strong indicators of opportunity, and that eliminating barriers for families to live in neighborhoods with high levels of resources and opportunities contributed to a striking diminishment in opportunity gaps. Desegregation, in this light, is as much about resource distribution, educational standards, and structural inequalities as it is about the racial distribution of students across schools and districts.

More Information

More on nation-wide segregation trends:

- Noguera, Pedro A. "Why School Integration Matters." Educational Leadership. 2019 Article
- "Fault Lines: America's Most Segregating School District Borders." EdBuild. https://edbuild.org/content/fault-lines
- "Gentrification and Disinvestment 2020." National Community Reinvestment Coalition. Report
- "The Greater Boston Housing Report Card 2019: Supply, Demand, and the Challenge of Local Control." The Boston Foundation. Report

On continued need for desegregation efforts in Massachusetts:

- "Commonwealth Fault Lines: District Boundaries, Public Perception, and School Segregation in Massachusetts." Policy For Progress. 2020. Report.
- Scharfenberg, David. "Massachusetts' Public Schools are Highly Segregated. It's Time We Treated That Like the Crisis it is." Boston Globe. December 2020. Article.

On the successes of integrated schools:

- Montt, Guillermo. "Are Socioeconomically Integrated Schools Equally Effective for Advantaged and Disadvantaged Students?" Comparative Education Review. 2016. Article
- Potter, Halley, Kimberly Quick, and Elizabeth Davies. "Report shows Districts and Charters Pursuing Socioeconomic Diversity." The Century Foundation. 2019. Report
- Learned-Miller, Carole. "Cambridge Public Schools: Pioneers of Equitable Choice."
 The Century Foundation. Report.
- Fife, Brian L. Desegregation in American Schools: Comparative Intervention Strategies. Praeger Publishing 1992. Book

Demographics

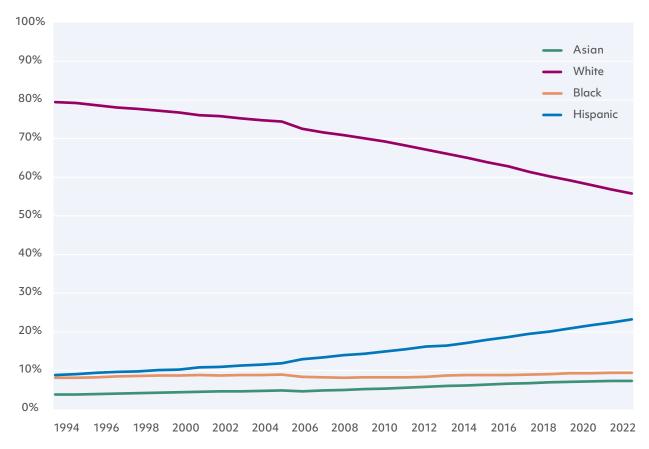
Overview

Improvements in educational achievement in Massachusetts' schools over the past three decades are even more impressive considering the growing diversity and increasing level of need among the Commonwealth's students. **Since 1993, Massachusetts has seen a marked increase**

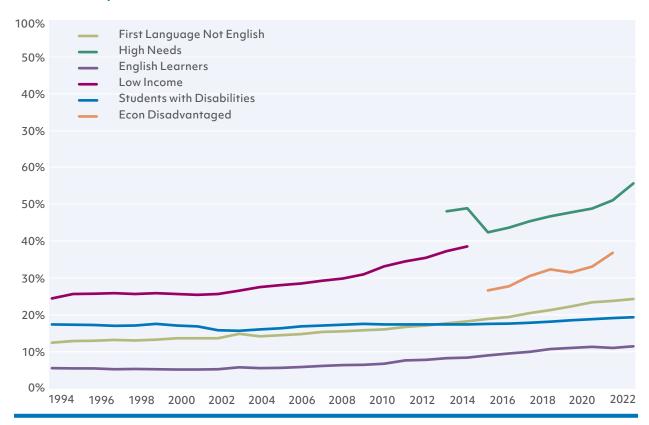
in the number of students of color and in the number of students from low-income families.

At the same time, the percentage of students with a high level of need—including English learners, students with disabilities, and students from low-income backgrounds—has grown.

MA Student Demographics



Selected Population of MA Students



Source: MA School and District Profiles, DESE

In both of the above charts, the year in the x-axis indicates the end of the school reflected in the data. For example, data shown for the school year "2022" corresponds to the 2021–2022 school year. Also, in 2014, Massachusetts stopped calculating the number of students considered "Low Income" and instead used a different calculation to determine the number of students considered "Economically Disadvantaged." This change in calculation means the "Low Income" category from 2014 cannot be compared with the "Economically Disadvantaged" category. In 2019, the Student Opportunity Act again altered the designation process for low-income students, returning it to the method used before 2014.

Appendix: Ages of School Attendance

All children residing in Massachusetts are required to attend school between the ages of 6 and 16.

Per state law (603 CMR 8.00), students must enroll in school in September of the year in which they attain the age of six; they must do so whether they turn 6 before, during, or after September.

Massachusetts requires districts to provide K–12 education to students through age 21.

Students may freely drop out of school once they turn 16 years old, though the state requires districts to set up exit interviews with all high school dropouts. There are some rare exceptions by which younger students may be allowed to drop out.

Educator Workforce Diversity

Overview

As Massachusetts' student population has grown more diverse in recent decades, the educator workforce has not kept pace. Massachusetts' difficulties in this domain mirror a national pattern, in which the educator workforce is growing more unrepresentative of the student population over time. This dynamic is especially concerning given the abundance of research suggesting that students of color benefit academically from having teachers of

color, and that students as a whole **benefit** from having a diverse group of teachers. Research is especially clear on the benefits to Black students of having Black teachers. In response, DESE has enacted **programs** aimed at increasing teacher diversity, including accelerated certification programs, grants to districts to fund diversity initiatives, and teacher fellowships in a number of target districts.

In Massachusetts

According to the Massachusetts Department of Elementary and Secondary Education, faculty and staff members in Massachusetts schools remain much less diverse than their students.

While 42% of Massachusetts students were students of color (defined here as those not categorized by the state as white) in the 2021–2022 school year, only 13% of faculty and staff were people of color (defined as those teachers not categorized by the state as white).

In the 2021–22 school year, only 13% of faculty and staff were people of color.

These figures reflect all staff in Massachusetts public schools; full-time teachers represent 54% of total staff. As of the 2021–2022 school year, 91% of Massachusetts teachers are white.

Challenges at all steps of the educator pipeline—including recruitment, certification, retention, and professional development—all likely contribute to the state's difficulties in creating an educator workforce whose diversity mirrors the student population. Recent research from the Harvard Kennedy School suggests that disparities in the early stages of the pipeline drive much of the problem in the Commonwealth, finding that people of color are less likely than other college-educated adults to sit for Massachusetts' educator licensure examinations, the Massachusetts Tests for Educator Licensure (MTEL).

DESE has devoted a number of resources and programs to developing a more diverse workforce. The **Teach Western Mass** program, for example, offers an accelerated, one-year teacher certification and training program aimed at bringing a diverse corps of effective teachers to schools and districts across Western Massachusetts. DESE's **Teacher**

Diversification Pilot Program offers grants to districts for efforts to increase teacher diversity, and its InSPIRED fellowship empowers educators in select communities "to recruit the next generation of culturally responsive, diverse and effective teachers."

National Context

Similar to Massachusetts, educator diversity nationwide has also lagged behind the growing diversity of the student population. In 2016, the federal Department of Education released a report titled "The State of Racial Diversity in the Educator Workforce." That report acknowledged the abundance of resources demonstrating the benefits of a racially diverse educator workforce, found that

the nationwide educator workforce is 82% white, and highlighted the increasing lack of diversity at progressive steps of the educator pipeline. It also pointed to alternative teacher certification programs, and especially Historically Black Colleges and Universities (HBCUs) as engines of greater educator diversity.

State of Research

Two key points emerge in research concerning educator diversity. The first is that educator diversity benefits students: studies and reports from the Center for American Progress; American University and Johns Hopkins University; and Scientific American, among others, bear out this point. The second is that the United States continues to struggle with recruiting and retaining a diverse teacher workforce. The relative lack of diversity has been documented in research from the Brookings Institution; Harvard University's Graduate

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Educator Issues

Collective Bargaining

Overview

Collective bargaining refers to the process by which unions negotiate the terms and conditions of employment with employers. In Massachusetts, the right to collective bargaining is recognized for private- and public-sector workers, including teachers in all public schools, both traditional public school districts and charter public schools. Teachers and other public employees first won collective

bargaining rights in Wisconsin in 1959, rights which spread to other states throughout the 1960s.

Today, virtually all traditional public school teachers, support staff, and administrators (except principals) in Massachusetts belong to a local union affiliated either with the National Education Association (NEA) or the American Federation of Teachers (AFT).

In Massachusetts

In Massachusetts, all teachers in traditional public school districts and in some charter public schools are represented by local bargaining units that "collectively bargain" the terms and conditions of teachers' employment through contract negotiations. According to the Massachusetts Department of Labor Relations, most public employees in Massachusetts, including teachers, were granted the right to join unions in 1958, and municipal employees were granted the right to collective bargaining for "wages, hours, and terms and conditions of employment" in 1965.

Local bargaining units are affiliates of one of two state-level teachers unions operating in Massachusetts:

 The Massachusetts Teachers Association (MTA) is an affiliate of the National Education Association (NEA). It is the larger of Massachusetts' two teacher unions with 115,000 members. It has the majority of urban, suburban, and rural districts and also represents all of

- public higher education faculty and staff except for the University of Massachusetts, Dartmouth.
- The American Federation of Teachers-Massachusetts (AFT-MA) is an AFT affiliate.
 It reported 24,745 members in 2022 and includes the state's largest local teachers union, the Boston Teachers Union.

Local unions perform a variety of functions, most notably negotiating collective bargaining agreements on issues involving all teachers in a local district. They also provide members with other services, such as dispute resolution, legal counsel, professional development resources, grassroots organizing, and lobbying at the state and national level. Members have opportunities to serve in leadership positions or on policy-setting commissions at the local, state, and national level.

Massachusetts makes a distinction between "mandatory" and "permissive" subjects of collective bargaining. Mandatory subjects are items that "directly impact terms and conditions of employment" and must be decided through

collective bargaining. These include salary, health insurance, class sizes, the length of the school day, promotional procedures, and teacher evaluation and employee discipline policies. "Permissive" subjects are items that are only subject to collective bargaining if both the union and the district agree to make them so. These include abolishing or creating positions, reorganization of an employer's operations, and "matters of education policy." A full list of "mandatory" and "permissive" subjects of collective bargaining may be found in the

Massachusetts Department of Labor Relations' A Guide to the Massachusetts Public Employee Collective Bargaining Law, pages 152–158.

Collectively bargained agreements may remain in force for up to three years, provided that the parties involved (in education, the school committee and the local teachers' union) may agree to allow the agreement to remain in effect until a successor agreement is decided upon.

National Context

In recent years, a number of states have passed "right to work" laws prohibiting the requirement that public sector workers, like teachers, join unions. Massachusetts never passed such a law.

In 2017, however, the U.S. Supreme Court ruled in Janus v. American Federation of State, County, and Municipal Employees ("Janus") that states and localities may not require public employees to pay agency fees to their collective bargaining unit; this ruling applies to Massachusetts and all states. Shortly after the Janus decision, Massachusetts enacted a law allowing a union to require a nonmember to pay for the reasonable costs and fees, including arbitrator fees and related attorney fees, for grieving or arbitrating a matter arising under a collective bargaining agreement at the nonmember's request.

Janus does **not** eliminate the right of collective bargaining, and the local union as the "exclusive representative" maintains the authority to bargain on behalf of all employees in the bargaining unit, even those who are not union members. Therefore, all public sector employees in Massachusetts remain subject to the terms of their respective collective bargaining agreement, and non union members cannot bargain for themselves.

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- National Education Association
- Massachusetts Teachers Association
- · American Federation of Teachers
- American Federation of Teachers, Massachusetts

Teacher Preparation, Licensure, and Professional Status

Overview

Teacher preparation refers to the processes by which individuals become licensed teachers, including training and education programs attended to gain

licensure. These programs are meant to produce teachers who are able to lead their future students to success.

In Massachusetts

In order to become a teacher in any Massachusetts public school, candidates must pass a series of exams known as the Massachusetts Test for Education Licensure (MTEL). Teaching certifications, as well as preparation courses for the exam, are often paired with a degree gained through a teacher prep program at the college level. An initial teacher's license is good for five years, at which point teachers must apply for a "professional" teacher's license, which requires masters-level education.

Teachers receive "professional status," sometimes called tenure, after three years of employment, without regard to performance or any metric other than career longevity. Superintendents may also grant professional status to teachers before the three-year mark on recommendation of that teacher's school principal.

Once a teacher attains professional status, they may only be removed for "good cause."

This means teachers with professional status can be dismissed only for "inefficiency, incompetency, incapacity, conduct unbecoming a teacher, insubordination or failure on the part of the teacher to satisfy teacher performance standards," and may be dismissed for performance-related reasons only after undergoing a years-long cycle of evaluation and professional development; they also have the right to appeal such decisions to arbitration.

Current reform efforts toward teacher preparation in Massachusetts include district-based programs aimed at training teachers for urban schools and implementing the use of partner schools to allow teaching candidates a chance for real practice. This combines theory with practice and allows earlier access to in-classroom experience. Improving teacher preparation programs may also constitute an important strategy for increasing teacher retention: in 2022, the statewide teacher retention rate was 89.8%.

Teacher preparation programs are evaluated through a formal review process and a Candidate Assessment of Performance (CAP) by the Department of Elementary and Secondary Education.

National Context

Nationwide, teacher preparation programs have highly variable effectiveness; many teachers graduate their programs unprepared to serve the communities and classrooms they enter. A 2013 review of teacher education programs by the National Council on Teacher Quality (NCTQ) found a wide range among programs. The NCTQ review emphasized that many programs are relatively unselective and that most programs do not prepare aspiring teachers to teach content to the levels required by state standards. In 2019, NCTQ's assessment showed some improvement, especially in reading instruction.

Massachusetts' state teaching licensure is valid in most states due to an interstate agreement. Teacher

licenses from other states are not valid in Massachusetts, however; teachers licensed in other states must obtain a Massachusetts teacher's license to work in the Commonwealth. Administrators with out-of-state administrator licenses and at least three years of experience may qualify for a temporary administrator license in Massachusetts but must seek a Massachusetts license for permanent employment.

With regard to tenure, many states have recently removed tenure or diminished its protections. In states like Indiana and Texas, teachers must rely on annual contracts. Other states, like Rhode Island, require a teacher to undergo a performance review before receiving tenure.

State of Research

Research shows major issues in teacher preparation across the nation.

According to a 2016 study from Endicott College, 26% of teachers reported feeling unprepared for their first year on the job. However, those who trained in the same state they later taught in were more successful overall. Teacher preparation programs are not held to a common standard, so their curricula and levels of preparation vary widely. There is an overall lack of training in social/emotional education and cultural competency, which is especially important in Massachusetts given that 87% of the state's school staff were white while 44.3% of students were students of color in the 2021–2022 school year (the most recent year for which both figures are available).

Research is inconclusive as to the impact of professional status/tenure on student achievement. The recent trend of states eliminating or weakening teacher tenure has provided researchers with case studies: A Brookings Institution study found that student outcomes improved slightly in Florida after tenure was eliminated, with larger gains among low-income students. Studies focused on North Carolina have tended to find that the state's tenure system was effective in selecting high-quality teachers for tenure, but that a moratorium on tenure had little impact on student achievement.

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Pay Differentiation

Overview

Differentiated pay refers to teachers receiving salaries through alternative pay structures that are based on a variety of factors other than career longevity and educational attainment alone. For example, teachers working in schools with large

amounts of high-need students may be paid more under differentiated pay systems. Another version of this idea is performance-based pay, which aims to incentivize quality teaching and growth in talent over time by rewarding performance.

In Massachusetts

Performance pay is **not widely used** in Massachusetts. In 2010, the federal Teacher Incentive Fund **awarded** Massachusetts \$27 million to accelerate teaching improvement efforts in Boston and Springfield through its "**aMAzing**"

Educators" initiative. Massachusetts included in its plan for use of the funds an increase in differentiated pay options for teachers to increase retainment. There is no publicly available report on the outcome of this initiative.

National Context

Nationwide, differentiated teacher pay has been implemented in various forms and contexts, including performance-based pay programs and professional development compensations. This movement was spurred by the link some researchers have made between teacher skill and performance to student achievement, with many studies showing that teacher quality is the most important factor in

determining student success. An article from the nonprofit research organization WestEd details the policy trend, where it comes from, and the many ways differentiated pay is implemented. In addition, the Center for American Progress has published multiple reports on differentiated pay in specific districts throughout the country including New Haven and Baltimore.

State of Research

More research is needed for an in-depth exploration of differentiated pay and its value.

Results have been mixed regarding the many variations of differentiated pay. Performance pay is one of the most common methods, but research is

unclear as to what this pay system's effects are on student achievement.

More Information

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COVID-19 Pandemic

The COVID-19 Pandemic and the K-12 Response

Overview

Alongside its devastating health effects, the COVID-19 pandemic had a major, destabilizing impact on K-12 education. Schools and districts needed to adapt to provide students and families with social and emotional support—and often with wraparound services like meals, broadband access, technology, and personal protective items like facemasks and hand sanitizer. Academically, school closures and virtual learning in the spring of 2020 led to a patchwork of virtual, hybrid, and in-person models across the state in the following school years.

To help address the myriad difficulties of this period—health, financial, academic, administrative and operational—the state and federal government each passed pandemic relief packages that included funds for schools and districts. While the pandemic's full impact on K–12 education remains unknown, this chapter aims to provide an overview of these impacts and the major interventions used to mitigate them.

Definitions

In-person education: This refers to the school model in which students learn together in a classroom environment with their teacher(s) physically present.

Virtual education: This refers to the school model in which all interactions between students and their teacher(s) occur in a virtual context, i.e. by videoconference, phone calls, and emails. Many schools and districts use online learning management systems that include video conferencing, messaging systems, syllabus management, and assignment submission, among other capabilities.¹

Hybrid education: This refers to any model in which education is neither fully in-person nor fully virtual. For example, students may physically attend school for 3 days in the week but learn via videoconference for 2 days a week. Another form of hybrid education involves instruction for which some students are present in the classroom while the instructor simultaneously teaches students who attend virtually.

Synchronous learning: Learning that occurs in a context where the educator and learner interact in real time, whether in a classroom or on a virtual platform.

Asynchronous learning: Learning that occurs in a context where the educator and learner are not

¹ For the purposes of this section, "virtual education" refers to the virtual model used in the vast majority of schools that, before the COVID-19 pandemic, offered in-person instruction. Separately, Massachusetts offers two "Commonwealth virtual schools," in which all instruction is delivered online. Virtual schools were authorized in 2012 (see M.G.L. Chapter 71 Section 94) and thus predate the pandemic.

interacting in real time. Examples of asynchronous learning might include: a student watching a recorded lecture; a student completing homework assigned by an educator; or an educator providing written feedback to a student that the student reviews on her own time.

Unfinished learning: For the purpose of this document, unfinished learning refers to learning that did not occur during the pandemic and

because of the pandemic's effects. It is the negative educational impact of the pandemic as a whole. There are many pandemic-related reasons why students might experience disruptions to their learning, including (but not limited to) stress and grief, increased financial precarity for their family, social-emotional ramifications of isolation, decreased classroom time, and, in some cases, long periods without meaningful instruction.

In Massachusetts

On March 15, 2020 Governor Charlie Baker issued an executive order requiring that all schools in the Commonwealth—both public and private—close for in-person instruction, initially until April 6, 2020. This mandated closure was later extended to include the remainder of the 2019–2020 school year. At a state level, DESE also canceled MCAS for the spring of 2020 and held graduation ceremonies either virtually or later in the summer with social distancing precautions.

DESE gave schools and districts wide latitude in determining the structure of their remote learning practice while initially recommending a focus on asynchronous instruction paired with synchronous support.

Some schools, especially those that had already provided students with devices like laptops before the pandemic, transitioned more smoothly than others into remote learning. Lower levels of access to computers, high-speed internet, and other technological tools contributed to decreased access to high-quality remote learning in Gateway Cities and among the Commonwealth's communities of color. Some districts remained fully closed for longer than others; some provided daily, synchronous instruction; and others relied on tools like homework packets and instructional websites.

Individual districts were responsible for preparing separate plans for the following school year, accounting for possible in-person, virtual, or hybrid modalities. During the 2020–2021 school year, the Baker administration generally encouraged in-person education while allowing districts to

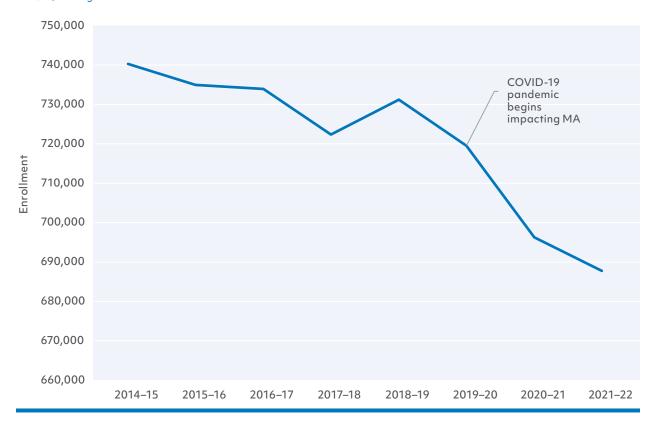
determine their own plans. In practice, there were discrepancies across the state in both when and how schools reopened for in-person instruction. The Commissioner of Elementary and Secondary Education announced in February 2021 that all elementary schools would be required to offer fully in-person instruction by April 5 of that same school year; he required the same by April 28 for middle schools and by May 17 for high schools.

In May 2021, the Baker administration announced that *all* schools and districts would be required to offer full-time, in-person instruction during the 2021–2022 school year. As of January 2022, **district-by-district disparities** remained in the level of virtual education available to students who must remain home due to a positive COVID test.

About three-quarters of public school districts saw an enrollment decline during the pandemic, though many of these districts were also experiencing such declines before the pandemic. In some cases, students appear to have left remote or hybrid public school districts in favor of fully in-person, private options, homeschooling, or multi-family "learning pods." Both the private and parochial school sector saw its enrollment decline in the 2020–21 school year, however, before bouncing back slightly in the 2021–22 school year. Homeschooling enrollment, by contrast, more than doubled in the 2020-21 school year before declining again in the 2021–22 school year. Most public school districts whose enrollment grew between 2019 and 2022 were either charter public schools or vocational school districts.

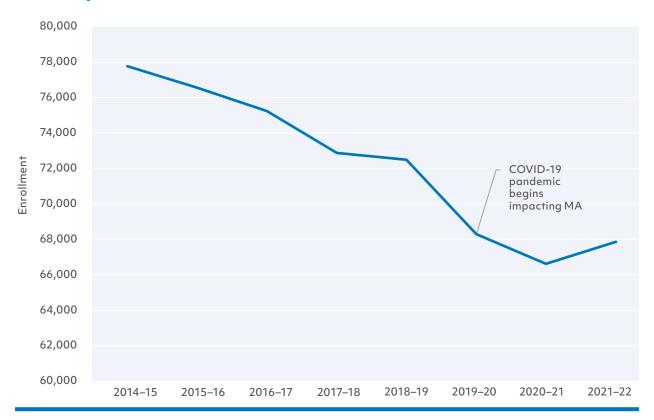
Enrollment in Local Public Schools

2014-15 through 2021-22



Enrollment in Private/Parochial Schools

2014-15 through 2021-22



Enrollment in Homeschooling

2014–15 through 2021–22



In addition to decreased enrollment, absenteeism increased during the pandemic. According to DESE, 98,000 students were chronically absent (defined as missing more than 10% of school days) in 2022, versus 41,000 in 2019. This is a 138% increase. 18% of all students were chronically absent in 2021, and 28% in 2022.

Students in urban school districts were especially likely to be chronically absent, with 39% missing 18 school days or more in 2022. Positive COVID-19 cases alone caused 1.7 million days of missed school in 2022.

The academic impacts of the pandemic have been substantial. In Massachusetts, math and reading scores dropped substantially on the National Assessment of Educational Progress between 2019 and 2022; these drops mirrored

nationwide patterns. Similarly, MCAS scores from 2022 showed substantial declines from prepandemic, 2019 levels. Declines have been larger in early grades (3–5) than later (6–8), suggesting that the pandemic's educational impacts may have been especially severe for younger children. According to polling from MassINC, 22% of Massachusetts parents believed their child was academically behind grade level in spring 2022, up from just 9% in November 2021.

Positive COVID cases alone caused 1.7 million days of missed school in 2022.

There were also substantial educational impacts beyond metrics of academic attainment. In a report summarizing the results of a survey of 2,617 Massachusetts respondents conducted between October 4, 2020 and February 18, 2021, a team of UMass researchers reported several such impacts. Of the parents surveyed, 63% of those "with children receiving specialized services through school have seen these services decrease in frequency."

In terms of social-emotional development, 75% of parents with children kindergartenaged or older reported they were "quite" or "extremely" concerned about their children's social-emotional development in light of the pandemic. Nationally, research suggests that the pandemic's social isolation and disruptions to routine could lead to increased anxiety and depression among school-aged children.

The disruptions to instruction associated with the pandemic also had large impacts on families and caregivers. In the UMass survey on pandemic

impacts, parents reported spending an average of 2.5 hours per day monitoring their children during remote learning, with parents of elementary-aged children reporting an average of 3 hours per day. When asked whether they felt confident in their "ability to support their children's learning in a fully remote or hybrid learning environment," high-income parents were more likely than lowincome parents to answer affirmatively. **Just 13%** of parents making less than \$30,000 a year said they felt "very confident" in supporting their children's learning in a remote context, versus 25.7% of parents making more than **\$200,000**. The extra demands placed on parents in their children's education during this period may have contributed to the sharp drop in labor market participation among parents reported by Pew Research in October 2020. These figures together demonstrate the outsized impact on low-income families of the challenges posed by remote learning.

State and Local Response

Much of the K–12 response to the COVID-19 pandemic was planned and implemented at the local level. School committees determined many decisions about how and when schools would reopen for in-person instruction, as well as about educator working conditions during the pandemic and criteria for potential returns to virtual schooling. Many consulted with their local departments of health in making these decisions. They often delineated these conditions through memoranda of understanding (MOUs) signed with local teachers unions. Education Reform Now and the Massachusetts Business Alliance for Education published a review of these MOUs as they impacted the 2020–2021 school year.

The state-level response included mandated changes to school and district operations, guidance, and funding. At the same time, districts were largely responsible for determining their own response plans, leading to significant differences in practice across the state. In addition to mandating shifts to virtual and then in-person learning,

the Department of Elementary and Secondary Education (DESE) provided ongoing updates to its policies on masking, social distance requirements, and return-to-school rules for members of the school community who tested positive for COVID-19. DESE further required that schools maintain a fully remote learning option for students who needed it in the 2020–21 school year, offer parents the option to change their children's learning modality throughout the year, and submit multiple reports on student-level learning modality. The statewide mask requirement in schools was lifted in February 2022; as of November 2022, the state requires that individuals isolate for at least 5 days before returning to school after a positive COVID test.

DESE also made substantial, temporary changes to its program of standardized testing and accountability in response to the COVID-19 pandemic. These changes were initially authorized in legislation passed in April 2020. Key changes included:

- Applying for a waiver of the U.S. Department of Education's assessment and accountability requirements under the federal Elementary and Secondary Education Act (ESEA). DESE sought and received waivers for the 2019–2020, 2020–2021, and 2021–2022 school years.
- Canceling MCAS testing in the 2019–2020 school year; in 2021, MCAS tests were shortened (with the exception of Grade 10 tests) and postponed until later in the spring than usual.
- Waiving, for the graduating classes of 2020–2022, the requirement that students pass 10th grade MCAS in English language arts, mathematics, and science and technology/engineering in order to graduate, provided that students in these cohorts demonstrate competency in required subjects via their high school transcript. Most students in the class of 2023 are required to pass the English language arts and mathematics MCAS tests in order to graduate, but they may receive a competency determination for science and technology/engineering rather than passing that MCAS test.
- Pausing the assignment of accountability levels, like "underperforming" or "chronically underperforming," to schools and districts in 2020, 2021, or 2022. In 2022, DESE began publishing some district, school, and student group-level measures that it had opted against publishing in 2020 and 2021. As of fall 2022, DESE continues to use this "accountability lite" model and does not publish performance indicator targets, progress toward said targets, or determinations of any school's or district's need for assistance or intervention.
- Postponing the requirement that districts submit spending plans for additional funding they would receive through the 2019 Student Opportunity Act The deadline plan submission was moved from April 2020 to January 2021.

As described in the "National Context" section below, the federal government passed three pieces of legislation providing Massachusetts (and other states) relief through the Elementary and Secondary School Emergency Relief (ESSER) fund. Massachusetts received \$2.8 billion for K–12 education through these packages. ESSER funds were allocated either by the legislature or by DESE. As mandated by the federal Department of Education, the state disbursed ESSER funds to districts "on the basis of their respective shares of funds received under Title I, Part A of the Elementary and Secondary Education Act of 1965 (ESEA) in fiscal year (FY) 2020."

In its **spending plan** for ESSER 1 funds, DESE indicated it planned to "use a portion of its state reservation to support the implementation of remote learning guidance." The state used ESSER II to operate summer "Acceleration Academies" and a program of matching grants for districts to offer their own summer school programs in 2021. Massachusetts' ESSER III spending plan continued this focus on summer learning, and it additionally allocated funds to early literacy tutoring, math acceleration programs, and virus mitigation strategies like air purifiers and improved ventilation. Schools and districts must spend down ESSER III funds by **September 2024**; according to the **Edunomics Lab at Georgetown University**,

the vast majority of Massachusetts districts have spent less than half the money as of December 2022

At the same time, the state has continued to implement the **Student Opportunity Act's** education funding increases, with special emphasis on high-need districts.

National Context

As in Massachusetts, the pandemic appears to have caused a nationwide drop in public school enrollment. Schools reopened for in-person instruction at different times in different states, and state governments adopted a wide range of policies regarding masking, social distancing, and virtual education options.

Throughout the country, students experienced large disruptions to their learning. Enrollment dropped in public schools and has not yet rebounded; chronic absenteeism has increased; and a dip in graduation rates may signal the end of two decades of national progress on that metric.

In 2021 and 2022, some signs emerged of potential teacher shortages in certain states and districts. The extent of these shortages appears to vary widely, as do their causes. According to survey data from the National Center for Education Statistics, school leaders are much more likely to report difficulties in filling special education positions (65% report difficulties) than general education positions (43%). Among core subject areas, math teacher positions appear to be the most difficult to fill (30%). It remains unclear, however, what exact role the pandemic played in these shortages; enrollment in teacher preparation programs was already declining before the pandemic, and the U.S. lacks strong data on supply and demand in the teaching profession.

Federal Relief Response

As described in the "In Massachusetts: State and Local Responses" section above, the federal government apportioned substantial funds to schools and districts through multiple pieces of legislation. Key legislation included:

- The Coronavirus Aid, Relief, and Economic Security (CARES) Act of March 27, 2020, which established the Elementary and Secondary School Emergency Relief (ESSER) fund. The CARES Act appropriated \$13.5 billion to ESSER, which distributed funds directly to states; states were required to pass at least 90% of ESSER funds directly to local education agencies (like school districts) and could use 10% for emergency needs at their discretion. This is referred to as "ESSER I." These funds had to be spent by September 30, 2022.
- The Coronavirus Response and Relief Supplemental Appropriations Act (CRRSA) of December 27, 2021 appropriated an additional \$54.3 billion in ESSER funding to states. This is referred to as "ESSER II." These funds must be spent by September 30, 2023.
- The American Rescue Plan of March 11, 2021 appropriated \$122.7 billion in supplemental ESSER funding. This is referred to as "ESSER III." States were required to submit spending plans on how they would use these funds; the legislation stipulated that one-third of the funding would flow to states only after these plans were submitted. State education agencies (like DESE) were required to use 5% of their portion of the funding to address learning loss, 1% to fund afterschool activities, and 1% for summer learning. Districts were required to apportion at least 20% of their funding toward strategies to address learning loss. ESSER III funds must be spent by September 30, 2024.

Crucially, there has been divergence in states' use of these funds. In early 2022, Education Reform Now released a report finding that all but 7 states had failed to ensure that funds are targeted to schools and students with the highest level of need. States and districts have also been criticized for spending the money slowly.

Strategies Used to Mitigate Learning Loss

As mentioned above, federal COVID-19 relief packages required that certain amounts of funding be used for evidence-based interventions aimed at addressing the pandemic's impact. Some strategies that have been indicated by the federal Department of Education, DESE, or Education Reform Now's federal policy team include:

- Summer school/"Acceleration Academies:"
 This strategy recoups lost learning time,
 often for specific subjects or specific students
 who experienced especially large learning
 disruptions during the pandemic. Massachusetts'
 "Acceleration Academies," modeled on similar
 programs used during state receivership in
 Lawrence, offer a blend of summer learning and
 recreational activities to students.
- Individualized tutoring: High-impact, individualized tutoring has a strong and robust evidence base for its effectiveness. These programs work best when they occur during the school day, include at least 3 sessions per week, occur in groups of 4 or fewer students, and provide students with a consistent tutor who receives adequate training and oversight.
- Extended day: This strategy adds additional time to the school day, either required or optional. It is one of the strategies most frequently cited in state and local ESSER spending plans, though many districts have made the extended time optional for students.
- Extended school year: This strategy also adds instructional time, but it does so by increasing the number of required school days in the academic year. A study comparing school calendars in multiple countries concluded that a longer school year could provide more learning time to students, allowing them to increase their academic performance, but noted that instructional quality is paramount.

- Community-based learning hubs: Learning hubs are physical spaces that offer students basic services, academic support, and enrichment.

 Many are run by community- and faith-based organizations. For example, Oakland's public schools partnered with one such hub, Oakland REACH, to support students and families. Key attributes of a successful hub include high-quality academic enrichment, community, a focus on social/emotional health, tech support, and wraparound services.
- Competency-based learning: Competency-based education uses individualized student-level data to provide a personalized education to each student. Given that school closures, remote learning, and social-emotional impacts of the pandemic varied widely, this approach could help determine where each student needs more support to succeed.
- **Diagnostic assessments:** As schools and districts continue to determine the pandemic's impact on students, **diagnostic tests** offer a strategy to determine where each student needs additional help to succeed academically. **Unlike summative, comprehensive exams** (like MCAS), diagnostic tests are not meant for any use in accountability. They can be used to assess a student's starting point and help teachers learn each student's individual needs.

State of Research

Students continue to experience academic disruptions as a result of the COVID-19 pandemic, meaning that research on those impacts must by nature be provisional. That said, researchers have already determined some key patterns that are likely to hold. The missed learning time, stress, grief, and inconsistency students have experienced since March 2020 have caused large declines in students' academic outcomes, and achievement gaps appear to have grown wider.

Research has also provided insight into the relative potential of various interventions aimed at addressing the impact of lost learning time. High-impact tutoring appears to be one of the strongest strategies, with research suggesting large benefits for both in-person and virtual tutoring options.

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Alternative School Models and Pathways

Regional School Districts

Overview

While the majority of Massachusetts school districts are coterminous with a single city or town, there are also **87 regional school districts in the state** (37 K–12 regional districts; 21 "partial regional districts," in which some towns taking part in the regional district additionally a municipal district for some grades, i.e. elementary school; and 29 vocational districts, 2 which are covered in their

own section below). These districts are **formed** by voluntary association of multiple municipalities into a single district; agreeing municipalities may choose to regionalize all grades or only some. The Amherst-Pelham regional school district, for example, serves grades 7–12, and the local school districts each serve their own K–6 students.

In Massachusetts

Regional school districts receive funding through the same mechanism as other districts in the state, the Chapter 70 formula.

Regional school districts are most common in the less population-dense parts of the Commonwealth, such as Western Massachusetts and Cape Cod. In 2018, the Department of Elementary and Secondary Education released a report showing that enrollment had declined over a 10-year period in rural districts while remaining stable statewide. Declining enrollment, combined with the rural nature of such districts, places strains on their budgets, particularly in operations and transportation. The report recommended "providing resources and incentives to encourage districts to expand existing regional districts or share services more broadly." By consolidating costs, regionalization could mitigate some of the financial burdens faced by districts with declining enrollment.

The 2019 Student Opportunity Act mandated the establishment of a Rural Schools Commission to address the specific financial challenges facing regional school districts, many of which face significant transportation costs and declining student populations.

The **commission** met seven times in 2021 and 2022 before releasing its **final report** in July 2022. That report recommended that Massachusetts:

- "Substantially increase funding for the state's rural school aid program and explore revising the formula"
- Increase transportation funding for rural districts
- "Move to a rolling foundation average in the foundation budget formula" to insulate districts from large impacts of declining enrollment

² Of these 29, 26 are vocational-technical schools as discussed in the next section of this document, "Vocational/Technical Schools." Three are agricultural high schools.

- "Increase incentives and supports for rural school districts to combine and form more cost-effective regional school district[s]"
- Encourage rural districts to "adopt shared services agreements," potentially including shared superintendencies
- Establishing a Special Education Funding Reform Commission
- "Cap the number of students leaving rural districts through the school choice program," and

 Provide districts with technical expertise when purchasing health insurance plans, as well as "evaluate the feasibility of joint purchasing plans"

There are a number of specialized subsets of regional districts. Vocational/technical districts, which are covered in their own section below, are often organized regionally to provide students with career and academic education concurrently. The Commonwealth also offers six agricultural schools, most of them high schools, that operate regionally.

National Context

Outside of New England, school districts are not as commonly associated with a single municipality. The unique history of New England's municipal governance structure has led to a similarly characteristic structure of school governance. Nationwide, many school districts are effectively "regional," in that their catchment boundaries do not conform with a single city's or town's borders.

In New England, Connecticut is seeking greater regionalization as a means to reduce costs and increase efficiency in public education. The state legislature's education committee voted several times between 2019 and 2022 to move forward with bills that would increase incentives and decrease obstacles to district regionalization. In New Jersey, a January 2022 law established a grant program to reimburse districts for costs incurred while conducting feasibility studies toward regionalization.

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On regional school districts in Massachusetts:

- Massachusetts Department of Elementary and Secondary Education. "Regional School District Organization." Website
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Vocational/Technical Schools

Overview

Vocational/technical (Voc-tech) programs, which offer career-oriented instruction in addition to academics, are offered both within traditional school districts and as independent, regional vocational/technical districts. These programs offer alternative educational opportunities to students who wish to learn a trade. Regional vocational/technical districts operate similarly to other school

districts, formed by agreement of participating traditional districts and funded through tuition payments made by those districts. Vocational/technical education is popular in Massachusetts, with rising enrollment and competitive admission leading to some concern that many students who would thrive in a voc-tech school lack access.

In Massachusetts

In Massachusetts, vocational/technical programs are governed by Chapter 74 of the General Laws. Voc-techs are defined as school programs that are "designed to educate and prepare students for both employment and continuing academic and occupational preparation." These programs combine competency-based instruction in a career-focused field, such as culinary arts, cosmetology, automobile repair, and engineering, as well as academic preparation consistent with Massachusetts' academic standards.

While some of these programs operate within traditional districts or single district schools, the state counts 26 regional vocational-technical school districts as of FY2020, which function as independent districts of choice.

In total, more than 63,000 students across the Commonwealth **enrolled** in all such programs in the 2021–2022 school year, accounting for 22% of all enrollment in grades 9–12 statewide.³

In total, more than 63,000 students across the Commonwealth enrolled in all such programs in the 2021–2022 school year, accounting for 22% of all enrollment in vocational/technical schools

As independent districts, vocational-technical school districts operate under an enrollment and funding structure distinct from that of traditional district schools. Vocational technical districts are a type of regional school district, formed by the voluntary association of two or more districts, subject to approval by the Commissioner of Elementary and Secondary Education. Regional vocational/technical districts are administered by a regional vocational/technical school committee,

³ This figure also includes students enrolled in special education beyond Grade 12.

called boards of district trustees. These boards may consist either of the chair and two members of each municipality's school committee, or of three residents of each municipality.

The districts are funded through payments provided by each participating municipality. Under the agreements by which they partake in a vocational/technical district, sending districts are responsible for both instruction and transportation for the students they send to the vocational/technical school. In some cases, non-resident students may be admitted; their sending district also generally must

provide payments to the vocational/technical district.

Many vocational/technical programs in Massachusetts are facing greater numbers of applicants than they have spots to fill. The state allows vocational/technical districts to employ competitive screening processes to determine admission, which has generated some concern that many programs are admitting students who will not go into the career fields aligned with their training while denying spots to students who would enter those career fields.

National Context

As in Massachusetts, vocational education has experienced increasing enrollment nationwide for the past decade, following several years of decline. As of 2012, which is the most recent data available, there were 3.8 million students enrolled in vocational/technical programs nationwide. State regulations vary, and this figure includes students in both vocational/technical schools and traditional schools with vocational/technical programs.

Updated research is scant on the nationwide impact of vocational/technical education on student outcomes. As the Brookings Institution outlined in a report on vocational/technical education, earlier, non-experimental research tends to support the conclusion that students in such programs have better career prospects and outcomes than their peers. Vocational/technical students may also be more motivated than peers, perhaps because many self-select into the programs.

State of Research

According to the Massachusetts Budget and Policy Center, a nationwide study of voc-techs found that such programs can effectively boost earnings for graduates by about 11%, as the schools focus on preparing students to participate in the workforce. This increase in income was driven entirely by an increase in the earnings of male students, especially at-risk young men. Another controlled study of one voc-tech in California found that attendance increased the probability that students attended both 2-year and 4-year higher education institutions.

Similar patterns hold for voc-tech schools in Massachusetts. An analysis by Alison Fraser of Queen's University found that Massachusetts' voc-tech programs had lower dropout rates, higher graduation rates, and higher MCAS scores than traditional public schools in Massachusetts.

Vocational/technical schools in Massachusetts also graduate students with disabilities at significantly higher rates than the state's traditional public schools (81% vs 61%.) However, these results are not the products of formal studies and thus could be the result of vocational/technical schools and traditional public schools having different student demographics. One regression-discontinuity study of Massachusetts voc-techs found that while voctechs substantially boosted graduation rate by 10%, there was no effect on test scores.

More Information

On vocational/technical education in Massachusetts

- Jones, Colin, "Skills for Our Future: Vocational Education in Massachusetts." Massachusetts Budget and Policy Center
- Massachusetts Department of Elementary and Secondary Education, "Chapter 74 Programs."

On vocational/technical education nationwide:

• The Brookings Institution, "What We Know about Career and Technical Education in High School."

Career Pathways

Overview

Career pathways refer to programs that help students access pathways to high-quality post-secondary careers. It is important to note that these pathways do not take the place of post-secondary, higher education—in many cases, they will include

higher education. Rather, they are programs focused on providing students with the preparation, resources, credentials, and guidance for success in the career of their choosing.

In Massachusetts

In 2017, Massachusetts launched the High Quality College and Career Pathways Initiative, with the goal of expanding student access to high quality career pathways. The Initiative includes two pathways in addition to vocational/technical programs: **early college** (discussed in its own section below) and **innovation pathways**.

Innovation Pathways are programs designated by DESE that connect students to careers in in-demand industries, such as information technology or healthcare. The designation process begins with a joint application to DESE by a K-12 district and an employer representative. To receive a designation, programs must follow five "guiding principles":

- 1. Equity, "eliminating barriers to student participation," especially for students from historically underserved groups
- 2. Guided academic pathways, including at least two technical courses and two college-level courses
- 3. Enhanced student supports, like wraparound supports (discussed below)
- 4. Connection to career, including a 100-hour internship capstone

5. Effective partnership between at least one K–12 district and at least one employer representative

The Pathway must lead to industry-recognized credentials. Current Innovation Pathways programs can be found at the "Designated Innovation Pathways" page of DESE's website.

To help students develop pathways to postsecondary success, DESE offers a tool called the My Career and Academic Plan (MyCAP). This student-led, multi-year planning tool allows schools and districts to help students identify their interests and potential careers, map out paths to success in those careers, and access the resources, credentials, and coursework needed for success. All students in an Innovation Pathways program must use the MyCAP tool.

One proposal for expanding career education in the Commonwealth involves allowing traditional public school districts to **grant industry-recognized career certifications** to students. In a **2018 paper**, the Massachusetts Business Alliance for Education reported that 72% of Massachusetts jobs would require either a career certificate or a college degree by 2020.4

National Context

Nationally, the Strengthening Career and Technical Education for the 21st Century Act (Perkins V) provides funding to states "for the improvement of secondary and postsecondary career and technical education programs." In 2020, the federal government estimated it would disburse over \$1 billion to states through Perkins IV.

More Information

On career pathways in Massachusetts:

 Massachusetts Department of Elementary and Secondary Education. "Massachusetts High Quality College and Career Pathways Initiative." Website.

On proposals around granting industry credentials in traditional public schools:

 Massachusetts Business Alliance for Education.
 "A Proposal to Expand Opportunities to Earn Industry-Recognized Credentials." 2018.
 White Paper.

As of December 2022, this was the most recent figure the author had found estimating the percentage of Massachusetts jobs that require a college degree or career certificate, or that will in the future.

Early College

Overview

In early college programs, high school students undertake college-level coursework. They can do so by fully enrolling in college classes, either at a nearby college or online, or by attending some college courses while also taking classes at their secondary school. These programs allow students to earn college credits while simultaneously finishing high school, often saving them later

tuition payments. Research supports the benefit of early college, especially for academically strong students. Students who participate in early college programs can obtain a head start on college-level material, acclimate to post-secondary education, and often gain a stronger level of confidence in their suitability for college.

In Massachusetts

In 2017, the Massachusetts Department of Higher Education created the Early College Initiative. This program encourages partnerships between colleges and high schools to allow students, especially those who would be first-generation college-goers, to take college courses and careerbased classes. Designation under this program is performed by the Department of Higher Education and the Department of Elementary and Secondary Education. Applications must be presented jointly by a Massachusetts institution of higher education and a Massachusetts K-12 partner, with a planned program for students from the K–12 partner to receive college credit at the higher education institution. The partnership is voluntary. The two partner institutions are responsible for developing a programmatic model and a funding structure, though programs receive grant funding and support from the state once they are designated as Early College programs. As of 2021, there were 31 designated early college programs, which the state projected would educate about 4,000 students in the 2021-2022 school year.

Many Massachusetts students also earn college credits through the Advanced Placement program. Advanced Placement courses, a program of the College Board, are offered in a variety of subjects and culminate in an examination on which students are scored 1–5. Many public and private colleges and universities accept scores of 3 and above on these exams for course credit. A public-private partnership between the state and Mass Insight Education supports more than 80 high schools each year to expand Advanced Placement offerings, to support teacher development, and to encourage student participation, especially for students from historically underserved demographics.

In Massachusetts, students need to achieve a minimum score of 3 or 4 to qualify for credit at public colleges and universities; each academic department at each public college determines which score is required for credit. **Approximately 43% of all students in Massachusetts' 2021**

high-school graduating cohort took at least one Advanced Placement exam. In both 2020 and 2021, Massachusetts was the nation's top state for scores 3 and above. It is also the state that has seen the greatest improvement in AP scores over the past decade.

National Context

In 2002, the Bill and Melinda Gates Foundation launched the Early College High School Initiative. Students can earn an associate's degree or up to two years of credit toward their bachelor's degree.

The design of these schools varies widely and overall, and more research is required to designate the most effective implementation models.

State of Research

Research shows numerous positive effects of Early College Programs. According to a 2013 study by the American Research Institute, early college students are more likely to graduate from high school, to enroll in college, and to gain a college degree. In addition, students enrolled in early college have better attendance. These programs were shown to be particularly beneficial for traditionally underserved groups.

In 2019, Education Reform Now and the Alliance for Excellent Education released a report summarizing research on early college programs, concluding that the programs show promise in boosting student achievement and increasing higher education access.

According to the Massachusetts Alliance for Early College, a controlled matched-pair study showed that early college "produces significant gains in college matriculation and persistence." The study found that early college attendees were 15 percentage points more likely to enroll in college, and 16 points more likely to persist in college, than similar peers.

More Information

On Massachusetts' Early College Initiative:

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On Impact of Early College:

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On Design of Early College:

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School Choice Program

Overview

The Massachusetts inter-district school choice program gives parents the option to send their children to schools other than those in their home districts. This is an opt-out program, meaning

districts with seats available must allow nonresident students to enroll unless those districts opt out.

How it Works

Massachusetts first **passed** an inter-district school choice law in 1991, allowing students to enroll in traditional school districts other than the district in which they reside.

All districts are **presumed** by the state to participate in the program, meaning that districts are by default open to enrollment from out-of-district students. A district can opt out of the program if its "school committee holds a public hearing on this issue and then votes to withdraw from the school choice program" prior to June 1. This decision must be renewed annually as it expires after each school year.

Regarding the selection of students, there must be no discrimination of any kind in the choice of who is allowed to switch districts. If there are only enough seats available in the receiving district to accommodate some of the presumptive students, the receiving district must hold a lottery to select the incoming students. Other restrictions include the state regulation that not more than 2% of Massachusetts public school students may participate in the program in a given year, and that students participating in the school choice program are not eligible to receive transportation, which means in practice that the program is limited to those students whose families can drive their children to school.

In the 2021-2022 school year, 17,414 students participated in the school choice program, constituting just under the 2% cap of all students in the state.

Once a student is selected for school choice, the sending district pays \$5,000 per student to the receiving district to finance the student's tuition. This is a capped amount by state statute and is significantly lower than the average statewide in-district per pupil expenditure of \$18,519 per year. This \$5,000 is unchanged, in absolute dollar terms, from the program's inception in 1996; the cumulative rate of inflation over that period is 64.5%. According to the Department of Elementary and Secondary Education, the state treasurer deducts school choice tuition from the sending district's Chapter 70 aid; if there is not enough Chapter 70 funding to cover the full cost, the treasurer "deducts the remaining tuition from other state aid appropriated for the sending district."

National Context

According to the Education Commission of the States, 47 states and the District of Columbia have programs similar to Massachusetts' inter-district school choice program. In some states, these programs are voluntary (as in Massachusetts, where districts may opt out), while others have mandatory inter-district school choice. Some state programs include provisions that a student may be barred from choosing a particular school or district if that choice would interfere with a state's desegregation plan. Details about inter-district school choice programs in each state may be found on the Education Commission of the States' website.

More Information

On inter-district school choice in Massachusetts:

- "School choice," Massachusetts Department of Elementary and Secondary Education. Web page.
- "Advisory on Inter-District School Choice Pursuant to G.L. c. 76, §12B." Massachusetts Department of Elementary and Secondary Education. Web page.

On inter-district school choice in a national context:

• "The potential of interdistrict school choice," Richard D. Kahlenberg, *EdWeek*. Article.

Charter Public Schools

Overview

Charter public schools in Massachusetts are independently-run public schools that operate under five-year charters approved and monitored by the Commonwealth's Board of Elementary and Secondary Education. In Massachusetts, charter public schools are tuition-free and must operate as nonprofit organizations. They must not admit students based on selection criteria, but rather must use random lotteries, though preference is given

to siblings of current students. They also maintain waitlists when there are more applicants than seats, which is common given the high demand for seats in nearly all charter schools in the state.

Numerous studies have demonstrated a record of success for charter public schools in the Commonwealth, especially for students from historically underserved populations.

In Massachusetts

Charter schools were first established in Massachusetts under the Education Reform Act of 1993. There are two kinds of charter schools in Massachusetts: Commonwealth charter schools, which operate independently from traditional school districts, and Horace Mann charter schools, which operate as part of a district but with high levels of autonomy. A comparison of Horace Mann and Commonwealth charter schools may be found at the Department of Elementary and Secondary Education's website.

By state law, all charter schools in Massachusetts are public schools. They are free of charge, meaning they may not charge tuition; they may not use a selective admission process; instead they must use a random lottery when the number of applicants exceeds the number of seats available in a given school; and they are governed by nonprofit boards chartered by the state's Board of Elementary and Secondary Education ("BESE").

All charter schools in Massachusetts are public schools.

Charter public schools have greater autonomy and flexibility in how they approach key elements of education, including: curriculum design, staffing, teacher leadership, professional development, length of the school day, and school culture. In exchange for greater flexibility, charter public schools are held to higher accountability standards than traditional public schools. Each charter school must undergo a renewal process at least once each five years, during which BESE assesses its academic success, viability, and faithfulness to the terms of its charter. BESE may choose to renew a charter without reservations, place a school on probation, or close a school for poor performance. If the state finds that the charter school is doing well, the school may continue to serve students or even expand, should it choose to apply to do so.

Funding and the Cap

As with all public schools in Massachusetts, students in charter public schools are guaranteed a minimum level of spending per pupil. As a matter of accounting, the Commonwealth stipulates that this money flows through the district in which a student resides (the sending district).

By way of a somewhat simplified example: if Town X's per pupil spending is \$15,000 per student and Student A (a Town X resident) attends a Commonwealth charter school, Town X would send \$15,000 to the charter school to cover the cost of educating Student A. The state provides transitional aid, also known as "tuition reimbursement," to the sending district to help it adjust to decreased enrollment when students choose charter schools. During the course of a three-year phase-in starting in 2021, this transitional aid amounts to 200% over 3 years. In the past, this budget line was often underfunded, but even at half-funding was a national outlier. The 2019 Student Opportunity Act made a commitment to fully fund this transitional aid.

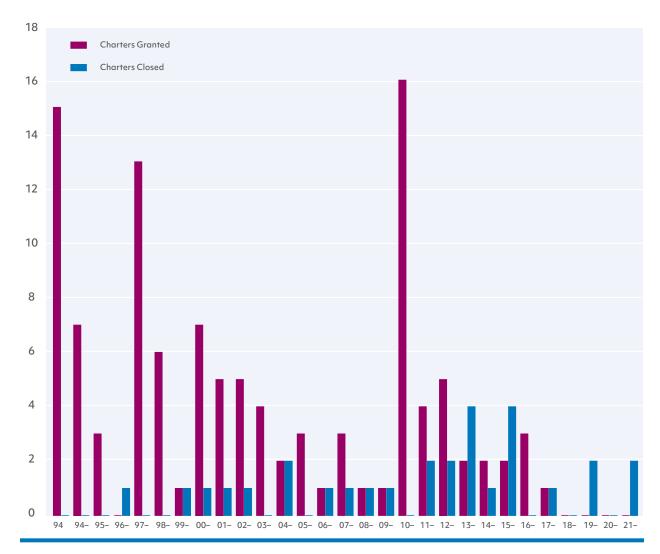
The state's original charter school law included a limit on the number of charter schools. This limit, or "cap," has changed several times since its inception, but it consists of the following provisions:

- 120 charter schools may operate in the Commonwealth, of which not more than 48 may be Horace Mann schools. As of the 2022–2023 school year, there are 70 Commonwealth charter schools and six Horace Mann charter schools.
- Of the 112 charters granted by the Department of Elementary and Secondary Education since 1994, 36 schools have closed or never opened. Of those that closed, 26 did so in the context of the state's accountability system for charter schools.
- For most districts, up to 9% of net school spending may go to Commonwealth charter schools, which roughly means that 9% of the district's students may attend charter schools.

- That net school spending figure rises to 18% for "school districts ranked in the lowest 10 percent of all statewide student performance scores based on the MCAS results from the two most recent school years."
- As of January 2022, some districts have reached the net school funding cap (such as Randolph, Boston, Malden, Lynn, and Salem) or are expected to reach it soon.

Charter Public Schools

Charters Awarded and Schools Closed



The above chart shows the number of charters that have been granted since 1994, as well as the number of schools that have closed in each year. Note that no new charter was granted between the 2018-2019 and 2021-2022 school years.

Demographics and Results

In Massachusetts, charter public schools are, on the whole, demographically similar to their surrounding districts. They serve similar populations of students of color, students from low-income backgrounds, and English learners. In the early years of charter school operation in Massachusetts, charter schools tended to enroll a much smaller percentage of students with disabilities and English learners than sending districts. The state legislature addressed this concern in its 2010 Act Relative to the Achievement Gap, which required charter schools to develop recruitment and retention plans for students with disabilities and English learners, among other populations. Since then, charter school enrollment for students with disabilities has come much closer to the level of sending districts and enrollment of English learners is higher than the statewide average.

In the 2021–2022 school year special education **enrollment** in charter schools is only slightly lower than the state average (16.1% to 18.9%) while the percentage of English learners in charters is higher than the statewide average (13.4% to 11%). The percentage of low income students has similarly risen and is now substantially higher than the state average (61.7% to 43.8%).

In terms of academic results, Massachusetts charter schools consistently outperform surrounding school districts, with especially strong performance for students of color and students from low-income backgrounds. In Boston, for example, one year in a charter school closes roughly ½ of the racial achievement gap. More information on results can be found below under the "State of Research" heading in this section.

National Context

Charter schools differ significantly across the country. Their legal status, structure, level of accountability, requirements of nonprofit status, and relationship to state laws governing traditional districts are all variable. Outcomes also vary significantly.

Generally, charter schools tend to provide better outcomes for students in places where they are accountable to a strong authorizer (the body that gives the school its charter), operate as a nonprofit, and focus on serving students in high-poverty areas.

Urban charter schools tend to have stronger records of performance than other charter schools.

A 2019 review of charter school studies from the Annenberg Center at Brown University found that, nationwide, "charter schools are having a positive effect for some students for some outcomes in some locations." Research does not support drawing generalized conclusions about charter schools absent the context of a given state's charter school policies and charter school sector.

State of Research

Research shows that charter schools in Massachusetts offer positive results and higher success rates for students than their peers in many districts. This is especially true in urban areas. A 2011 study from Harvard's Center for Education Policy compared academic outcomes for Massachusetts charter students with those of students who entered a charter school lottery but

were not admitted, finding that charter school attendance led to stronger math and English language arts performance among high school students, as well as stronger math performance among middle school students. A 2013 study from Stanford's Center for Research on Education Outcomes (CREDO) found that "on average that students in Massachusetts charter schools

make larger learning gains in both reading and mathematics." A 2016 Brookings Institution report found that "one year in a Boston charter [...] erases roughly a third of the racial achievement gap."

Research also suggests that Massachusetts charter schools do not have a net negative impact on the educational quality of traditional school districts, and that charter school expansion has corresponded to improved charter school quality in Massachusetts. The National Bureau of Education Research found in a 2019 report that "replication charter schools generate large achievement gains on par with those produced by their parent campuses." What's more, the study found that Boston's charter school sector grew more effective after expansion.

Nationally, the evidence on charter school effectiveness is less straightforward. Stanford's CREDO found in 2013 that the strength of charter school sectors varies widely across the country, with some state charter school sectors showing larger gains in math and reading than others. Charter school sectors, as this evidence suggests, differ by state in both their regulatory form and their results. Massachusetts has among the highest-performing charter schools in the country.

More Information

More on charter schools in Massachusetts:

- Massachusetts Department of Elementary and Secondary Education. "About Charter Schools." Website.
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More on the effects of charter school expansion in Massachusetts:

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Adult Education

Overview

While many students graduate from high school at age 18, some students take longer to complete their K–12 education, whether because they have been held back or have dropped out and then returned to school, among other reasons. Public school districts must educate students up to the age of 22 or diploma completion, whichever occurs first;

they are free, however, to increase that limit. Students who "age out" of traditional high schools but still wish to pursue their K–12 education transition to the adult education system, which is a unit of the Department of Elementary and Secondary Education.

In Massachusetts

Adult education is operated under DESE's Adult and Community Learning Services unit, which covers "a range of educational services for adults from basic literacy (including English for non-native speakers), numeracy, and high school equivalency / adult diploma programs (ADP)." The staff, employed directly by DESE, aid adult learners to achieve academic goals including English proficiency and high school equivalent diploma programs.

Consistent with federal regulations, Massachusetts measures adult learners' academic progress using a set of standards called the Measurable Skills Gains (MSG) Standards. These standards lead toward English proficiency, high school-equivalent credentials, or enrollment in post-secondary education or training.

National Context

On the federal level, adult education falls under the Department of Education's Office of Career, Technical, and Adult Education (OCTAE), which provides resources, support, and grant funding to states for adult education programs. States must report data on student achievement to OCTAE, and the federal Department of Education mandates that states use "valid and reliable assessments" to gauge and report student's attainment of progress levels.

State of Research

Studies of adult education programs show a wide variety in both program structures and results nationwide. A series of studies from the American Institutes for Research found that relatively few studies have examined postsecondary transitions for adult learners, and that teacher quality is both variable and highly important to student success. A 2007 study released by ETS found that completing adult education programs can provide increased opportunity and economic stability, but that program results vary. The ETS study found that the average adult learner gains less than 100 hours of instruction per year, with only a third of learners in that category gaining at least one educational level.

More Information

On adult education nationally:

- Yin, Michele and Stephanie M. Cronen. "Studying Teacher Effectiveness in Adult Education." American Institutes for Research. Series of Studies. 2015.
- Tamassia, Claudia et al. "Adult Education in America: A First Look at Results from the Adult Education Program and Learner Surveys." ETS. Report. 2007.

Recovery High Schools

Overview

Recovery high schools are four-year, diploma granting high schools designed to concurrently provide academic instruction and recovery services for students who are in recovery from drug and

alcohol use. These schools are meant to help students achieve their academic goals and graduate from high school while also providing for their specific health needs.

In Massachusetts

There are five recovery high schools in Massachusetts as of 2022. The schools are operated by traditional school districts or education collaboratives. The district is responsible for funding a recovery high school at a per pupil spending rate equivalent to the state's average. In addition, the schools receive funding through the state's Department of Public Health, which

cooperates closely with districts in the development and operation of recovery high school programs. The schools are subject to the same DESE data reporting and accountability requirements as all other Massachusetts public schools, and they must report data to the state Department of Public Health on each student's recovery from substance addiction.

National Context

The first recovery high school opened in Minnesota in 1989. As of November 2022, the American Addiction Centers reported that 25 recovery high schools operate across eight states. The schools tend to have small enrollment and highly structured, individualized programs. The schools provide an alternate path of return to academic success for students returning to sobriety; while eight of ten such students who return to their previous school relapse within a year, recovery high schools have a stronger record of success.

State of Research

While the research bank on recovery schools is not especially large, it suggests that the schools have a highly beneficial impact on the health and academic outcomes of their students. A 2018 study by Andrew J. Finch et al found that recovery high school students in Minnesota, Wisconsin, and Texas were more likely than students not in recovery high schools to report "complete abstinence" from several controlled substances. A 2008 study by D. Paul Moberg and Andrew J. Finch also found a "significant reduction in substance abuse" among students enrolled in recovery high schools, as well as highly positive student assessments of the schools' "therapeutic value," but less so regarding the school's educational programming.

More Information

On recovery high schools in Massachusetts:

- Organization website, Massachusetts Recovery High Schools. Web page.
- Massachusetts General Laws, Title XII, Chapter 71, Section 91: "Recovery High Schools."
- Pohle, Allison. "Funding Complexities Remain for Mass. Drug Recovery High Schools." WBUR. April 9, 2018. Article.

On recovery high schools nationwide:

- Finch, Andrew J. et al. "Recovery High Schools: Effects of Schools Supporting Recovery from Substance Abuse Disorders." The American Journal of Drug and Alcohol Abuse. 2018. Study.
- Moberg, D. Paul and Andrew J. Finch. "Recovery High Schools: A Descriptive Study of School Programs and Students." Journal of Groups in Addiction and Recovery. 2008. Study.
- Seay, Nikki. "Are Recovery High Schools Really Working?" Recovery.org: An American Addiction Centers Resource. 2019. Article.

Curricula, Programs, and Strategies

Preschool

Overview

Preschool, for the purposes of this document and in Massachusetts law, refers to education for children between the ages of 2 years and 9 months and the age at which the child becomes eligible for kindergarten in their city or town. Many students enroll in preschool for two years. Research suggests that enrollment in high-quality preschool is associated with improved outcomes for students both in school and later in life. That said, access and uptake are far less than universal—both in Massachusetts and nationwide.

Preschool is optional throughout the United States, with programs varying widely by state. This wide variation also exists in Massachusetts, which uses

a "mixed system" in which a combination of public and private providers offer preschool programs, financial support for families, and integration with local K–12 systems. Funding for preschool has grown over the 2000s and 2010s both in Massachusetts and nationwide, but the Commonwealth does not guarantee free preschool for children. High costs, precarious financial models, relatively low workforce compensation, and a less centralized governance structure than in K–12 have all prompted a number of reform proposals in the early 2020s, while the COVID-19 pandemic increased instability and decreased access in an already precarious sector.

Definitions

This document refers specifically to preschool, which falls within a broader category of early education and care. Because these terms and pre–kindergarten are commonly used to describe programs for young children and have different but sometimes overlapping meanings, this document will use them according to the following definitions:

- **Preschool** refers to formal education for young children, with a primarily educational purpose. In Massachusetts, this is schooling for children from ages 2 years and 9 months to the age of matriculation to K–12.
- **Pre-kindergarten** is often used interchangeably with preschool. In some jurisdictions, pre-kindergarten may refer specifically to formal education for older preschoolers, i.e., those

- who are 4 or 5 years old. Following Massachusetts law, this document does not make a distinction between preschool and pre-kindergarten; it will reference "pre-kindergarten" only in the context of specific programs that use that term in their name.
- Early education and early education and care are broader categories, used interchangeably in this document, to refer to all formal programs the purpose of which is to provide education, care, and developmental support to young children starting at birth. The programs included in this category will vary depending on each state's and district's definition. For the purposes of this document, preschool is one kind of program within the broader category of early education and care; other included programs may include

foster services, after-school programs for young children, or financial support to families of young children.

• **Child care** is not included within the scope of this document. It refers to programs whose primary focus is to provide care and supervision, but not necessarily education, to young children.

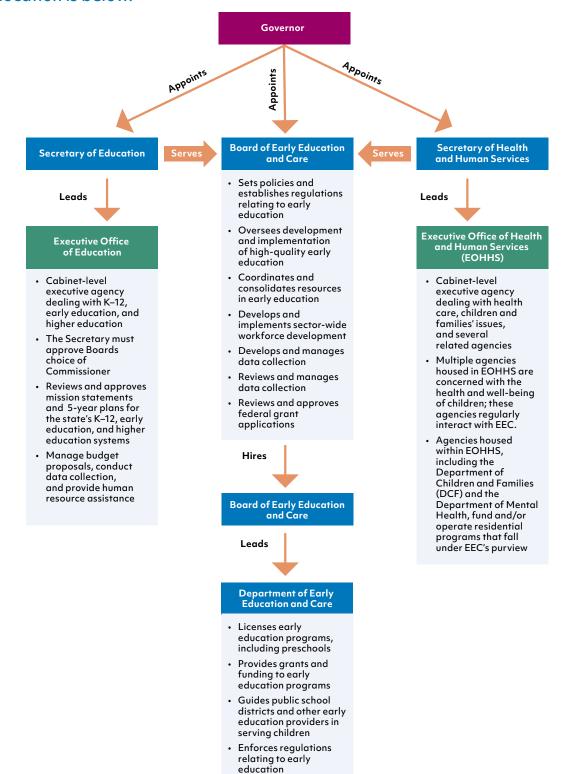
In Massachusetts

In Massachusetts, early education falls primarily under the purview of the Department of Early Education and Care (EEC), which licenses programs, provides grants and other funding to early education programs, guides districts and other providers in serving children, and enforces regulations. The Department of Elementary and Secondary Education (DESE) regulates public schools, including preschools based within public schools. There is inter-agency collaboration between EEC and DESE to support early learning goals and initiatives.

As with K–12, the Commissioner of Early Education and Care is appointed by a gubernatorial-appointed board (the Board of Early Education and Care) to lead EEC in enacting its mission. Governance comes from the Board of Early Education and Care, whose members are appointed by the governor according to **specifications** outlined in state law. The Secretary of Education sits on the Board, and the Commissioner of Early Education and Care serves as secretary to the Board.

Though EEC (in collaboration with DESE) has preschool in its scope of responsibility, EEC's primary function is regulating and subsidizing child care (birth through school age, including after school programs). The agency also regulates residential programs. This Primer, in line with its focus on education policy specifically, limits its treatment of early education in Massachusetts to programs with explicitly educational functions, namely preschool. It does not consider other programs under EEC's purview, such as childcare, foster care, or adoption agencies. That being said, EEC approaches all these programs, alongside preschool, under the umbrella of early education and care, meaning that there is necessarily some overlap between different kinds of programs. As noted in the Definitions section above, in this document, "early education" will refer to the broader set of programs under EEC's mandate, whereas "preschool" will refer to educational programs for children who are not yet eligible for kindergarten.

A high-level diagram of the roles of different government bodies in early education is below.



EEC is funded through the annual state budget; for FY23, the Department's budget is \$1.184 billion. Most of this funding comes from the federal government and is dispersed from EEC to providers in the form of subsidies with some grants. For example, the FY23 budget provides \$15 million for the Commonwealth Preschool Partnership Initiative, which provides grants for communities to expand access to early education. Some grants, like the Preschool Expansion Grant program, were directly funded through the U.S. Department of Education through EEC: others use state funding or a mix of both federal and state funds. Non-grant expenditures included \$60 million for increased pay to early educators; \$25 million for a reserve fund supporting program stability, evaluation, and financial assistance to providers; and \$15 million for resource and referral agencies that help families navigate the early education landscape.

Whereas the vast majority of Massachusetts' K–12 students attend public schools, private providers play a large role in the Commonwealth's preschool landscape. According to a 2021 report from the Massachusetts Budget and Policy Center, there were 8,100 licensed early education programs in Massachusetts before the pandemic, offering 230,000 licensed seats, of which half were for children younger than 5 years old. Of children filling these seats, 31,000 attended public district preschool—meaning that the remainder of these 230,000 seats were located outside public districts. Head Start, before the pandemic, served 14,000 children in Massachusetts.

While more Massachusetts children attend preschool than not, **Massachusetts does** *not* **guarantee** access to preschool for all students.

The Massachusetts Budget and Policy Center (MassBudget) estimates that a universal, high-quality preschool program, with capped fees for low-income families, would cost the state roughly \$20,000 per preschool-aged student. By comparison, public school districts currently spend an average of \$16,000 per student for the 31,000 preschool students they serve. We cite the average per pupil spending for preschool in public school districts here, even though many Massachusetts children attend preschools run by private and community-

based operators; the reason for this is because the state's mixed delivery system makes it challenging to collect accurate, centralized data encompassing all preschool models at the state level.

There are, however, some communities in Massachusetts that have made significant progress expanding preschool opportunities for students in certain age brackets. Boston's Universal Pre-K **program**, for example, offers 180 6.5-hour days of preschool for every 4-year-old in the city at no cost to families by working in partnership with community-based providers. In 2022, Springfield became the second district in Massachusetts to offer free, universal, full-day preschool, and the first to offer guaranteed seats to all 3-year-olds in the district. Many other districts offer free preschool seats to children via a lottery system or through socioeconomic targeting; in **Holyoke**, for instance, a Preschool Expansion Grant from the federal government and subsequent grants from the state allowed the district to double its number of preschool seats between 2015 (when the district went under state receivership) and 2020.

In 2020, the Massachusetts Legislature established a Special Commission charged with offering recommendations for new legislation concerning early education and care in the Commonwealth, including preschool. Specific to preschool, the Commission identified a number of **problems** including a lack of capacity to meet demand for preschool in many districts, insufficient subsidies for families and districts, and a need to increase the quantity and quality of data on longitudinal outcomes for preschool students. The report also identified several areas for growth in the early education sector as a whole, including precarious financial situations for many private providers and instability in attendance and enrollment due to the COVID-19 pandemic.

In March 2022, the Special Commission released a series of **recommendations** including: reimbursing programs, including preschool, based on enrollment rather than attendance; raising the reimbursement rate for preschool students; coordinating with the business community to develop guidelines for employment best practices; and increasing state support and oversight for private providers in the mixed delivery system.

National Context

The structure, size, and governance of early education programs vary widely by state.

Massachusetts is one of just six states with a distinct early education agency; it was also the first state to create such an agency. There are two other main models of early education governance: consolidation of early education responsibilities into a separate, larger agency (often an education or health and human services agency) or creation of an entity that coordinates efforts across multiple, independent agencies and stakeholders.

Funding structures vary similarly. Overall, funding to early education—and specifically pre-kindergarten programs—has been increasing. Per the Education Commission of the States, over half (55%) of all pre-kindergarten funding nationwide comes from the federal government, with 32% coming from state funds and 13% from localities.

In terms of access, most states offer state funding but no guarantee of universal pre-K;

Massachusetts fits this model. Some states, like New Hampshire, offer no state funding for pre–K. A small number of states guarantee universal pre–K, though some only guarantee half-day programs. At the local level, some cities have also guaranteed universal pre–K to their residents; New York City, for instance, guarantees a preschool seat for every four-year-old in the mixed delivery system. As noted above, some localities in Massachusetts have similarly moved forward with expansion or even universal preschool.

One federal early education program is **Head Start**, which offers early education programs, including both preschool and other models like child care, to low-income families at no cost. The program is administered by a wide variety of providers in local communities, including nonprofit, public, and community-based providers. These providers apply to the federal government to receive **Head Start program designation**, and with that designation comes federal funding to provide Head Start programs free of charge to low-income families.

In 2019, Head Start was funded nationwide at \$9.7 billion and served 873,019 students; in Massachusetts, the federal government appropriated \$151 million and enrollment was 11,771 students. This funding flows to local providers through a line item in the state budget; in 2021, the state additionally provided \$15 million of its own funds to the program through supplemental grants.

Through the 2010s, nationwide preschool enrollment remained roughly stable at half of three- and four-year-olds and over 90% of five-year-olds. Enrollment dropped sharply in 2020 as the COVID-19 pandemic shuttered schools around the country. This was true both nationally and in Massachusetts, where enrollment in preschool dropped by 30% from 2019 to 2020. Given the cognitive and life-outcome benefits (see "State of Research" below) associated with preschool enrollment, this decline will likely be associated with diminished academic and socialemotional outcomes as students in this cohort move into elementary school and beyond. It will be especially important to investigate how the drop in preschool enrollment interacts with existing educational disparities along race and class to consider appropriate policy tools to diminish its negative impacts.

State of Research

Research generally suggests that access to early education programs, and specifically to pre-K, is beneficial to later academic outcomes and conducive to narrowing achievement gaps. Multiple studies have associated enrollment in preschool with increased test scores when students enter later grades. As preschool enrollment has expanded nationwide, more recent studies have shown more complex relationships between preschool enrollment and later academic outcomes; in general, though, the key takeaway is that preschool does generally leave children better prepared for kindergarten, but the quality of any given program matters a great deal. The weaker relationship in recent scholarship between preschool and academic outcomes may stem from an increased variance in program quality that comes alongside an increasingly larger scale of preschool.

Preschool also has strongly positive effects on later life outcomes, even beyond students' time in K–12 education. One of the most-cited papers drawing this conclusion draws on data from Boston, showing that students who were admitted to preschool in Boston via a lottery system showed higher levels of high school graduation, SAT taking, and college attendance, as well as lower levels **of juvenile incarceration**—but no discernible impact on state achievement test scores. A 2013 paper by Christina Weiland and Hirokazu Yoshikawa found that Boston's program "had moderate-to-large impacts on children's language, literacy, numeracy and mathematics skills, and small impacts on children's executive functioning and a measure of emotion recognition." Similarly, a paper by economist James Heckman suggests that preschool attendance is associated with improved life outcomes even for siblings and children of the preschool student.

More Information

On the state of early education in Massachusetts:

- Special Legislative Early Education and Care Economic Review Commission. "Final Report—March 2022." Report.
- "Infographics" Strategies for Children.
 (This is a collection of infographics detailing demographics, funding, and other key facts about early education in Massachusetts, from the early education advocacy organization Strategies for Children.) Infographics.
- "Strategic Action Plan (2020–2025)."
 Massachusetts Department of Early Education and Care. Action plan.
- "Recent Progress in Preschool Expansion." Strategies for Children. One-pager.
- Jones, Colin and Marcus Jiang. "Care for Our Commonwealth: The Cost of Universal, Affordable, High-Quality Early Care and Education Across Massachusetts." Massachusetts Budget and Policy Center. 2021. Report.

On legislative proposals around early education:

• Reilly, Adam. "Mass. Senate advances sweeping plan to revamp early childhood education and care." GBH. 7 July 2022. Article.

Other helpful links:

• Description of the Preschool Expansion Grant program. Mass.gov. Link.

Special Education

Overview

Special education is an alternative form of schooling for students with disabilities as defined by Massachusetts law, Chapter 71B. All students have the right to academic programming that fits their needs, under both state law and the federal Individuals with Disabilities Act (IDEA), which was modeled on Massachusetts special education law.

Schools must provide special education services to students who need them, though in cases where districts cannot reasonably provide a specific, needed service, they may fulfill this duty by providing for the student to attend a school where such services are provided.

In Massachusetts

As of the 2022–2023 school year, over 179,000 Massachusetts students have disabilities as defined by the Department of Elementary and Secondary Education. Students with disabilities thus constitute 19.4% of the state's public school student population. This percentage has risen every year since the 2013–2014 school year; it had stood stable at 17% between the 2009–2010 and 2013–2014 school years.

In Massachusetts, each school district is responsible for identifying and assessing students who may require special education services. Parents, caretakers, and other adults working with a given child may also make a referral for special education services, though the district must obtain parental consent to assess the child or else sue for due process. If a district's evaluation team decides that a student requires special education services, it will draft an Individualized Education Program (IEP) that describes what services the student needs. The document is updated at least once per year, with additional documentation on educational goals required after the child turns 16 years old. The IEP can specify more frequent updates, and

parents/guardians can require it to be updated as frequently as they desire. If a school cannot provide these services, an out-of-district placement can be made or parents may file for their child to be placed in a private school that can offer services at no cost to the family.

Students with disabilities who do not qualify for an IEP may instead qualify for a "504 plan," named for Section 504 of the federal Rehabilitation Act of 1973, which outlines how the district will support the student and remove barriers to the student's education. A 504 plan is subject to less stringent regulations than an IEP.

Funding for special education programming comes from four sources: city or town funding, federal IDEA grants, state Chapter 70 funds (special education is a population category receiving additional funding), and state Circuit Breaker funding. The Circuit Breaker reimbursement program, established in 2004, provides funds to a school if spending for special education exceeds four times the state foundational average per pupil, with the goal of reimbursing the school for 75% of costs above that threshold. The

2019 Student Opportunity Act, which updated the Foundation Budget by which state aid to districts is calculated, specifically targeted special education as one spending area for increased funding. Over a four-year period, the SOA also **expands** circuit breaker funding to include out-of-district education costs associated with fulfilling students' IEPs.

Massachusetts districts sometimes provide special education services through collaboratives, which are educational agencies formed by agreement of two or more districts. In special education collaboratives, the participating districts partner to provide services that any individual district may not be able to provide on its own. Through a memorandum of understanding, they agree to share costs and offer joint programs in a regional partnership. The Education Cooperative (TEC), for example, is a cooperative serving 16 local school districts in the greater Boston area; it provides separate, special education campuses, therapeutic curricula for students with social/emotional needs, and transitional services aimed at helping students succeed in post-K-12 life.

Even with the Circuit Breaker program, special education can constitute a significant expense to districts. This is especially true in cases where students must be placed in state-approved private educational settings that are able to provide necessary services. Because the district is responsible for expenses relating to its students' education, even a small number of such placements can place a strain on district finances.

More Information

On special education in Massachusetts:

- Special Education website, Massachusetts Department of Elementary and Secondary Education.
- "A Parent's Guide to Special Education."
 Federation for Children with Special Needs.

English Learners and Bilingual Education

Overview

Both nationally and in Massachusetts, schools have seen a profound increase in the number of English learners in recent decades. This growing linguistic diversity is one of most salient demographic trends in Massachusetts, and it requires new resources and practices to educate all children.

As the number of English learners (ELs) in Massachusetts expands, the debate about how to educate them has grown as well.

In Massachusetts

As of the 2022–2023 school year, 25% of Massachusetts students speak a language other than English as their first language, up from 12% in 1994. In some districts, the figure is much higher: 72% in Lawrence, 85% in Chelsea, and 49% in Boston.

This linguistic diversity has increased the level of need in many districts for English learner education, and enhanced funding for districts with larger numbers of English learners was a major component of the 2019 Student Opportunity Act.

As of the 2022–23 school year, <u>25%</u> of Massachusetts students speak a language other than English as their first language.

Massachusetts relies on two distinct practices for English learner education, sheltered English immersion (SEI) and bilingual education.

In SEI, English learners are taught academic content in English, often in the same classrooms as native English speakers. Through Massachusetts' Rethinking Equity and Teaching for English Language Learners (RETELL) program, all core academic teachers who teach English learners must obtain a SEI Endorsement on their professional license demonstrating their competency in SEI. These endorsements can be obtained through multiple pathways, including SEI Endorsement courses, an SEI MTEL, and possession of an English as a Second Language license. Administrators who supervise teachers of English learners must also obtain an SEI Endorsement.

The second approach, **bilingual education**, was instituted through the 2017 **Language Opportunity for Our Kids (LOOK) Act**. In bilingual education, English learners may be taught academic subjects in their native language while simultaneously learning English. In line with this practice, the **LOOK Act allows districts to develop language acquisition plans for English learners incorporating instruction in their native language.** The law also

provides greater parent/guardian input in students' language acquisition programs, requires that districts verify that each educator in a given English acquisition program is qualified for that program, and requires DESE to establish benchmarks for English language proficiency. It furthermore directs the Board of Elementary and Secondary Education to establish a State Seal of Biliteracy, which districts may award to students who demonstrate "a high level of proficiency in English and at least one other language."

From 2002 until the LOOK Act, SEI was the only approach to English learner education permitted in Massachusetts. This was due to a 2002 English-only ballot question that banned schools from practicing bilingual education and required all students to be taught entirely in English. The ballot question was part of a nationwide effort, though Massachusetts was one of a handful of states to implement Englishonly laws. That 2002 law was repealed by the LOOK Act, allowing districts greater flexibility in choosing their approach to English learner education.

National Context

As in Massachusetts, the nation as a whole has seen a growing population of students whose first language is not English. The U.S. Department of Education's Office of English Language Acquisition administers grant programs, conducts research on English learner education, and disseminates information to inform policy decisions in the states.

In 1968, President Lyndon B. Johnson signed the Bilingual Education Act, which provides federal funds through competitive grants to districts for the establishment of bilingual education programs.

However, bilingual schools are still a center of discussion and debate. With many students who are not native English speakers, the U.S has had to adjust its schools and instruction to reflect this growing population.

A major challenge is a shortage of qualified EL and bilingual teachers. The American Federation of Teachers estimates that nationally as of 2015 less than 3% of students in grades K–8 received bilingual education.

State of Research

There is a variety of research available on English learner education. One of the most consistent findings throughout this scholarship is that bilingual instruction benefits all students, including those who are native English speakers. The research compares multiple styles of integrating bilingual instruction and the possible economic and social benefits of doing so. It also examines the racial implications of the bilingual debate and the role of evaluation in strengthening programs.

More Information

On English learner education in Massachusetts:

- "LOOK Act." Massachusetts Department of Elementary and Secondary Education. "LOOK Act." Website.
- "Massachusetts Blueprint for English Learner Success." Massachusetts Department of Elementary and Secondary Education. Website.
- "Rethinking Equity and Teaching for English Language Learners (RETELL)." Massachusetts Department of Elementary and Secondary Education. Website.
- "Sheltered English Immersion Endorsements (SEI)." Massachusetts Department of Elementary and Secondary Education. Website.
- Jones, Colin. "Excellence for All: Supporting English Language Learners in Massachusetts." Massachusetts Budget and Policy Center. Report.

On methods of English learner education:

- Bialystok, Ellen. "Effects and consequences of Bilingual Education." International Journal of Bilingual Education and Bilingualism, 2016. Review
- Sanchez, María Teresa (Maite) Sánchez. "Historical Review of bilingual education policies and dual-language policy development." Journal of the National Association for Bilingual Education, 2018. Review.

Social and Emotional Learning

Overview

Social and Emotional Learning (SEL) refers to teaching behavioral, mental, and emotional management within schools and academic contexts. The goals of these lessons include managing emotions, making responsible decisions,

and strengthening relationship building. There is no one universal definition for Social and Emotional Learning nor one form of implementation to achieve its multiple positive effects.

In Massachusetts

Massachusetts was one of eight states accepted into the Collaborative for Academic Social and Emotional Learning (CASEL) in 2016. **The Department of Elementary and Secondary Education (DESE) has identified social and emotional learning as one of its five strategic priorities**. This topic continues to be a point of conversation in policy circles as more schools and districts determine how to prepare staff for helping an increasing percentage of students who have experienced trauma or may be categorized as high need. Districts can adopt SEL lesson plans and program designs provided directly by CASEL and available on the DESE **website**.

A key element of DESE's efforts in SEL is its focus on "Safe and Supportive Schools," which includes a suite of programs and resources on ensuring that all students feel safe and supported in their learning environment. Resources provided by DESE include information on cultural inclusion, emergency management, LGBT inclusion, and suicide awareness. Trauma-Sensitive School practices are a subset of Safe and Supportive School practices focused on ensuring that districts, schools, and staff are prepared to address the academic and socialemotional needs of students who have experienced trauma.

DESE also provides a self-reflection tool districts can use to identify avenues for becoming more safe and supportive to students. The document follows frameworks established by the Safe and Supportive School Commission, co-chaired by the Commissioner of Elementary and Secondary Education. The Commission also identifies potential improvements in schools' and districts' access to social-emotional resources and seeks federal funding for its Safe and Supportive Schools programs, among other duties.

A DESE grant program, funded by a state budget line item, provides funds to districts that develop action plans based on the Safe and Supportive Schools self-reflection tool. For FY2023, \$318,696 was allocated to 27 districts across the Commonwealth.

Programs supporting non-academic needs that influence a student's well-being and academic performance are often called wraparound services. Such services are integrated into schools while supporting students and often their families in a holistic manner. Wraparound services may include social-emotional programs, mental and behavioral health professionals, dental and/or medical care, support for nutrition and wellness, and support for students' families,

such as adult education. Through funding secured through the Obama administration's Race to the Top competitive grant program, Massachusetts was able to implement Wraparound Zones in several Massachusetts districts. An **evaluation** of the programs by the American Institutes for Research found that students in WAZ programs saw improvements in academic achievement.

Massachusetts does not require schools to employ social workers, though it does require that any social worker working in a Massachusetts school have a Master's degree in Social Work or Counseling and a passing score on the Communication and Literacy Skills test.

National Context

Social emotional learning is largely determined at the state level. Each state applies the concepts in its own way. To make these integrations more consistent and measurable, CASEL created a set of best practices after assessing the success of hundreds of SEL programs. This acts as a guideline that other states can design programs from, as Massachusetts has done.

School social workers are a popular strategy for incorporating wraparound services into school

settings. According to the National Association of Social Workers, school social workers are responsible for intervention on three levels: school-wide prevention programs and practices; small-group, short-term interventions to improve early academic and social–emotional engagement to reduce problem behavior; and individual long-term interventions for students with serious academic, behavioral, or social–emotional problems that constitute a chronic condition.

State of Research

Research and analysis from the Journal of the American Academy of Child and Adolescent Psychiatry, the Rennie Center, the American Institutes for Research, and others shows that implementation of social and emotional learning strategies has multiple positive effects: improving student performance, better classroom behavior, and an increased ability to manage stress and depression.

According to **CASEL**, when compared with students in schools without SEL programming, 57% of SEL students improved their skill levels. Research also shows these effects to be long-lasting, affecting students for up to 18 years after their participation in SEL programs. Beyond students, SEL implementation has **economic benefits** with an \$11 return for every \$1 dollar spent on SEL.

More Information

On SEL Design and Impact:

- Durlak, Joseph A. et al. "'The Impact of Enhancing Students' Social and Emotional Learning: a Meta-Analysis of School-Based Universal Interventions."" Child Development. 2011. Article
- "Social and Emotional Learning: Opportunities for Massachusetts, Lessons for the Nation." The Rennie Center. 2015. Report.
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- O'Conner, Rosemarie et al. "A Review of the Literature on Social and Emotional Learning: Students ages 3–8." ICF International. 2017 Review.
- Newsome, W. and Anderson-Butcher, Dawn and Fink, Janet and Hall, Lisa and Huffer, Jim. (2008). "The Impact of School Social Work Services on Student Absenteeism and Risk Factors Related to School Truancy." *School Social Work Journal*. **Article**.

Civics Education

Overview

Civics knowledge is low nationwide, and some advocates believe that mandatory civics education in K–12 schools would improve civic awareness and participation. Potential applications include mandated courses, standardized assessments, and

graduation requirements. **Massachusetts**has civics standards and requires students
to complete at least one civics-related project
during high school, but does not require students
to pass a civics exam in order to graduate.

In Massachusetts

In the wake of the 2016 election and continued low voter turnout, "An Act to Promote and Enhance Civic Engagement" was signed into law in November 2018. The law aims to increase the use of civics education to "advance civil discourse among students." It requires Massachusetts public high schools and school districts serving eighthgrade students to provide at least one student-led, non-partisan civics project for each student. The project may be completed individually or in groups and must be relevant to local or national civics issues. The law also includes new requirements for civics curricula, including mandated coverage of the

Bill of Rights, the responsibilities of citizens, and issues of diversity and power structures. It further establishes a Civics Project Trust Fund to assist underserved communities in achieving the state's requirement. In 2022, the Legislature increased the Civics Project Trust Fund to \$2 million. The state awarded 28 Civics Project Trust Fund grants in 2020, 25 in 2021, and 44 in 2022.

In addition, the Department of Elementary and Secondary Education has formed a non-partisan program for high schoolers to help them pre-register as voters.

National Context

Civics knowledge among school-aged students is low nationwide, and there is a wide variation in each state's requirements for civics education. While most states require a civics course, fewer have a full civics curriculum, and many require only a half-year course. Less than half of states require students to pass a civics exam in order to graduate from high school.

State of Research

A series of national surveys beginning in 2016 found national civics knowledge to be at an all-time low, with only 26% of Americans able to name all three branches of government in 2017. This lack of civics knowledge is paired with diminished trust in government, with Pew Research finding that the percentage of Americans who trust in government has fallen steadily in recent decades, reaching a low of 17% in 2019. Research has shown that youth are engaging in activism and social movements at record levels yet, only 24% of eighth-graders scored at or above "proficient" on civics section of the National Assessment of Educational Progress (NAEP) in 2018, which was the last year in which NAEP tested civics as of December 2022.

More Information

Insights on Value of Civic Education:

- Sawchuk, Stephen. "10 Core Insights on Civics Education, and How to Improve It." Education Week—Teaching Now. Accessed November 20, 2019. Article.
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Personalized Learning

Overview

Personalized learning (PL) refers to strategies that personalize instruction. The goal is to tailor instruction to the needs of each individual student, meeting them where they are to optimize the interaction among teacher, student, and content.

As schools, districts, and governing bodies around the country have come to realize the differing needs

of a diversifying student body, greater attention has been paid to the necessity for more tailored approaches beyond one-size-fits-all classroom instruction. Technology is often used to aid in personalization, but is neither necessary nor sufficient for personalized learning. While many PL strategies use technology, others do not.

How it Works

A wide array of interventions fall within the category of personalized learning. These include:

Responsive assessment: Assessments that become more or less difficult in real time according to a student's performance. These assessments can provide a fine-tuned account of a student's needs and optimal learning path.

Competency-based learning: Instead of (or in addition to) a traditional system of matriculation from one grade to the next, competency-based programs require students to demonstrate competence in a particular skill (e.g., fractions or analyzing complex arguments) before moving on to the next skill in a given "tree." This kind of learning often involves a large amount of independent work because each student is progressing at his or her own pace; in some places, such as New Hampshire, competency-based approaches have been modified such that classes advance together.

Blended learning: Students learn some material on their own, for example online, and **spend some time** in teacher-led instruction. One style of blended learning is the flipped classroom, in which students

learn about a given topic online as homework, and then practice it in the classroom. A student might read about World War II and then have a class discussion the next day, rather than hearing a lecture on World War II in the classroom and then answering questions for homework. This method falls under PL in that students first encounter lesson content independently.

Personalized education plans: For each student, teachers create an individualized instruction plan based on that student's needs. Similar to Individualized Education Programs (IEPs) for students with disabilities, this practice encourages teachers to take individual learning paths into consideration when constructing their overall lesson plans.

Student-driven learning: Allows students greater choice in their learning path, including what topics to pursue, which classes to take, and/or when to move from one level to the next. In some ways, student-driven learning resembles the **Montessori Method**. One avenue for this method is project-based learning, in which students

learn concepts through self-directed projects, either individually or in groups. These projects often involve concepts from multiple subject areas. After Westford Public Schools piloted project-based learning, students who participated saw greater gains on the MCAS in English language arts than those who did not and had equivalent gains in mathematics.

More Information

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Expanded Learning Time

Overview

Expanded learning time (ELT) involves adding hours to the school day or days to the school year. Schools and districts use expanded learning time in various ways, including additional hours of regular instruction, small-group or one-on-one tutoring,

enrichment programs, or intensive programs during school vacations. Massachusetts has seen multiple successful instances of expanded learning time, and research demonstrated positive results, especially for at-risk students.

In Massachusetts

Massachusetts was an ELT pioneer in 2005, when the state **created** a budget line item to encourage districts to expand learning time, the Massachusetts Expanded Learning Time Initiative. The Commonwealth's program served as a model for the nationwide effort to expand learning time.

Massachusetts encourages schools and districts to employ expanded learning time. The state offers a grant to districts to implement such programs. Massachusetts has also seen successful instances of expanded learning time in districts

such as the Lawrence Public Schools and charter public schools.

In Lawrence, expanded learning time was key to the turnaround plan for the district starting in 2011. Lawrence added over 200 instructional hours each school year in K–8 schools. The district also implemented "Acceleration Academies," intensive sessions for struggling students held during the February and April vacations. Research suggests that expanded learning time contributed significantly to Lawrence's improvements.

National Context

Massachusetts—and especially Massachusetts charter schools—are a model for expanded learning time nationwide.

Massachusetts was the first state to support expanded learning time in high-poverty schools. During the Obama administration, the Race to the Top initiative supported Massachusetts in strengthening this model, and other states in adopting similar ones.

Several states, including New York, Tennessee, and Connecticut, now use both state and federal funds to support expanded learning time.

Massachusetts was the first state to support expanded learning time in high-poverty schools.

State of Research

Research on the impact of expanded learning time is generally positive, showing especially strong outcomes for students in underperforming and/or high-poverty school districts. Not all applications of expanded learning time are equal, however: research suggests that expanded learning time is most effective when the time is devoted to specific kinds of instruction, such as math and literacy coaching or experiential learning, and when it is led by certified teachers.

More Information

More on the benefits of expanded learning time:

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Public Higher Education

Section 27

Public Higher Education

Overview

The Massachusetts higher education system is a network of 29 campuses serving over 260,000 postsecondary students annually. Funded by a combination of state appropriations, tuition and fees, and philanthropy, the individual institutions have their own governing boards while also falling under the purview of the Commonwealth's Board of Higher Education (Board). As was the case nationwide, the percentage of Massachusetts students attending public institutions of higher

education experienced a decline for roughly a decade before the COVID-19 pandemic accelerated the decline beginning in 2020; this decline sharpened when the pandemic began before rebounding slightly in fall 2021. With some of the country's highest published tuition and fees for instate students at public universities and community colleges, Massachusetts offers need-based financial aid to its public higher education students, but student debt levels remain high and climbing.

In Massachusetts

Massachusetts offers public higher education through its 15 community colleges, 9 state universities, and 7 campuses of the University of Massachusetts (UMass). Each of the

Commonwealth's community colleges, state universities, and UMass campuses is listed in the appendix to this section alongside its FY22 enrollment and FY22 tuition and fees.

Governance and Funding

At the state level, each of these models falls under the Massachusetts Department of Higher Education (DHE), which itself is governed by the Board of Higher Education (Board). The Board defines the mission of the state's higher education system, works to hold institutions accountable to that mission, approves the awarding of degrees, sets system-wide goals and plans, develops statewide tuition plans for state colleges and community colleges, coordinates activity among the state's

public higher education institutions as needed, publishes spending plans, and approves the appointment of each state and community college's chief executive.

 Community colleges offer associate degrees, certificate programs, and some bachelor's degrees. They have open-access admissions. Each community college has its own gubernatorial-appointed Board of Trustees,

The Commonwealth's community colleges and state universities (excluding UMass) also offer online public higher education through Massachusetts Colleges Online, while UMass offers open-admission, virtual programs through and UMass Online. Tuition varies according to the institution offering the course, degree, or program a student enrolls in.

which in turn appoints the institution's President, subject to the approval of the Board of Higher Education. The 15 presidents form a Council of Presidents that provides governance in parallel with each college's individual board of trustees.

- State universities offer baccalaureate and master's degrees. Most of them are meant to serve a specific region of the state. As with the community colleges, each state university has its own Board of Trustees that governs the institution. Board members are appointed by the Governor and are generally regional leaders in business or civic life. Each university's Board then appoints a President, subject to the approval of the Board of Higher Education.
- All UMass campuses are **governed** by the UMass Board of Trustees, of which 17 members are appointed by the governor; one member is the Secretary of Education; and two members are students elected by the student body of their campus on a rotating basis, e.g., the member may be elected by students at UMass Lowell in one year and UMass Dartmouth the next. Five of the 17 gubernatorial-appointed members must be UMass graduates, one each from the Amherst, Boston, Dartmouth, Lowell, and Worcester campus. The Board of Trustees, in turn, appoints a Chancellor to serve as the chief executive of each campus. The Amherst campus (UMass Amherst) is generally considered the flagship university of the Massachusetts public higher education system.

Massachusetts' public institutions of higher education are funded by a mix of state appropriations, tuition and fees. According to the State Higher Education Executive Officers Association, state appropriations accounted for 63% of total funding to higher education in Massachusetts for FY21, while tuition and fees accounted for 37%. In FY23, the state budget appropriated \$1.6 billion for total higher education expenditures, which is the largest allocation to higher education since 2001. This figure represents an increase of \$161 million, or 11.1%, over the

FY22 budget. Major line items contributing to the increase included an additional \$39 million to the Massachusetts State Scholarship Program and \$68 million to the UMass system.

In FY23, \$664 million is allocated to the University of Massachusetts and \$175 million is dedicated to the Massachusetts State Scholarship program. Community colleges and state universities each have their own line item in the state budget, generally ranging between \$10 million and \$50 million. By statute, each institution's level of funding is determined by a funding formula developed by the BHE. For community colleges and state universities, this formula takes into account college participation, completion, workforce alignment, degree productivity, and the special mission of certain institutions. The University of Massachusetts has two separate funding formulas: one for the medical school and one for all other campuses. These take into account 10 separate factors including instructional costs based on enrollment, research, student support costs, and public service. In 2012, Massachusetts implemented a new, separate funding formula for community colleges that incorporated some performancebased measures, such as graduation rates; that new formula, however, ceased to be used after fiscal year 2016.

The various state colleges and universities also collect tuition and fees from students. The **State Higher Education Offices Association** (SHEEO) reports that Massachusetts' public institutions of higher education collected \$1.1 billion in revenue in FY2021. Consistent with national trends, SHEEO also reports that tuition revenue, including fees, has grown to constitute a larger percentage of total funding to higher education in Massachusetts over time, from 23% in 1980 to 37% in 2021. This reflects a steady increase in tuition rates and fees over time.

⁶ SHEEO does not explicitly include philanthropy in either of these categories.

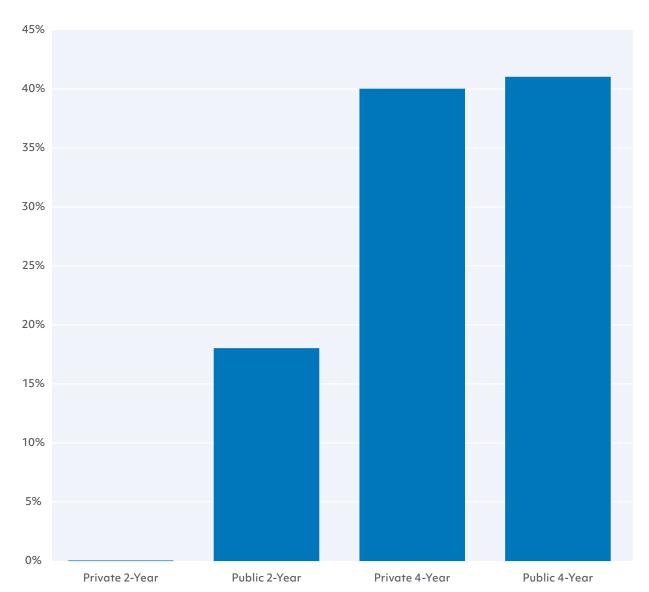
Enrollment Trends

In the 2020–2021 school year, 62% of Massachusetts public high school graduates went on to attend a college or university. Of those, a majority of just under two-thirds chose a public college, with most choosing a four-year public college. The second most

common choice was a private, four-year college. Only 0.1% of students chose private two-year college. As shown in the chart below, the percentage of Massachusetts high school graduates choosing private, 2-year colleges is vanishingly small.

Higher Education Choices among Massachusetts College-Going Graduates

2020–21 School Year



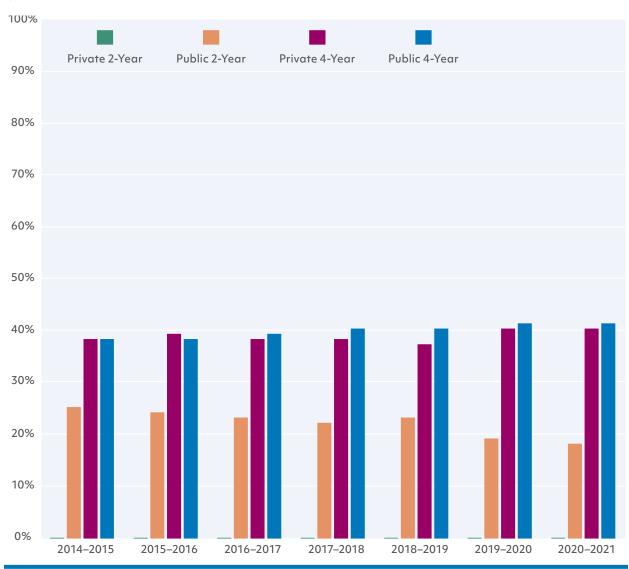
Source: Massachusetts Department of Higher Education

In general, this breakdown of college choices—just under two-thirds choosing public colleges and just over one-third choosing private colleges—has remained basically stable over time. The percentage

of students attending any college or university, however, dropped substantially in the 2019–2020 school year, coinciding with the beginning of the COVID-19 pandemic.

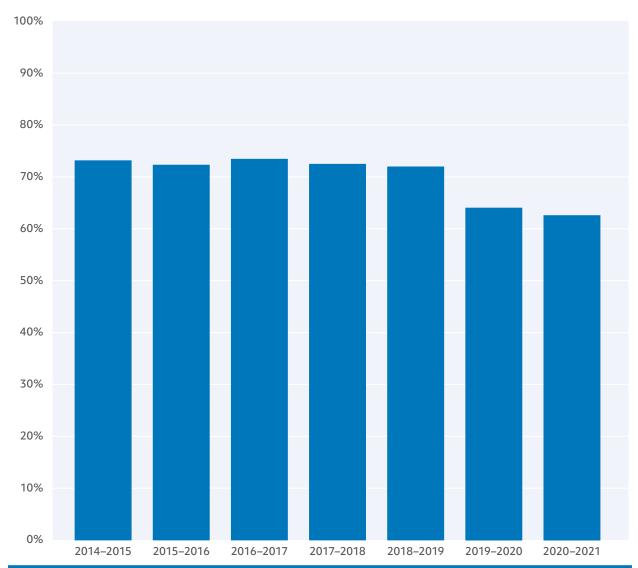
Percentage of College-Matriculating High School Graduates

by Kind of Institution Attended



Source: MA School and District Profiles, Department of Elementary and Secondary Education.

Percentage of MA High School Graduates Attending College or University



Source: Massachusetts Department of Higher Education

As of Fall 2022, the state has not yet published data on whether the percentage of students choosing to attend college or university recovered in the 2021–2022 school year.

Access and Affordability

Massachusetts' published tuition and fees for public higher education are among the highest in the nation. For FY2023, the average annual tuition, weighted to reflect enrollment levels, will be \$16,205 for UMass campuses; \$11,439 for state universities not in the UMass system; and \$6,865 for community colleges. By contrast, the average national tuition is \$9,400 for public four-year institutions and \$3,900 for public two-year institutions.

In general, tuition and fees for the Commonwealth's public institutions of higher education have increased while state-provided scholarships have declined. According to an analysis by the Massachusetts Budget and Policy Center's Anastasia Martinez, state scholarship funding declined by 28% between 2001 and 2021. Over a similar time period (2000 to 2022), a Hildreth Institute report found that the cost of tuition and fees increased by 59% at public 4-year institutions and by 52% at public two-year institutions, all while the median real household income grew by just 13%. The state's need-based grants covered 80% of students' tuition and fees at public four-year institutions in the 1980s; as of 2020, they covered just 10% of those costs. The result has been an increased burden of student loan debt on student borrowers

The cost of public higher education has a disproportionate impact on students of color. According to the Massachusetts Budget and Policy Center, the average price of tuition, fees, room and board, and supplies—even after accounting for financial aid—accounted for nearly half of the average Massachusetts Latinx household income in 2017. These costs accounted for 38% of the average Black household income, but just 21% of the average white household income.

Latinx males are 24 percentage points less likely to graduate from high school than white females.

The racial disparities in the financial burden of public higher education in Massachusetts correspond with disparities in access. According to data from DHE, racial disparities widen between high school graduation, college enrollment, and public college graduation: Latinx males are 24 percentage points less likely to graduate from high school than white females, but 32 percentage points less likely to enroll in college and 33 percentage points less likely to graduate from public college.

Outcomes

While Massachusetts' public institutions of higher education offer many bright spots in their outcomes for students, they **demonstrate troubling trends of persistent racial disparities and inconsistency of outcomes across institutions**.

A given pair of colleges whose incoming student bodies appear very similar may nonetheless offer those students wildly different chances of college completion and success. And, across the board, Latinx students—who have grown from 16% to 24% of Massachusetts' K–12 students since 2012—are especially likely to be underserved by the Commonwealth's higher education institutions. These trends are especially noteworthy in a state

whose tuition and fee costs are so much higher than the national average.

Graduation rates and on-time credit accumulation, which measures whether students are gaining credits quickly enough to graduate on-time as defined by their program, are two of the most important outcomes to track in public higher education. Prior to the beginning of the COVID-19 pandemic, these metrics had seen **gradual improvement** over five years in Massachusetts, but remained worryingly low. At four-year state universities excluding the UMass system, the average six-year graduation rate for the cohort

matriculating in 2014 was 61.3%, or 59.5% when excluding the specialized Massachusetts Maritime Academy and Massachusetts College of Art and Design. Thus, more than a third of students in this cohort did not graduate within six years.

At a two-year college, some students' desired outcome may be to earn a certificate of attainment or transfer to a four-year institution, while others may aim to complete the two-year degree. At Massachusetts' community colleges, on-time credit accumulation ranges from a low of 10% of students on track at Roxbury Community College to a high of 38% at Berkshire Community College. This means that fewer than a third of Massachusetts' community college students are on-track for on-time completion after their first year. Sixyear measures of student success are somewhat more positive: to measure this, Massachusetts uses the American Association of Community Colleges' Voluntary Framework for Accountability (VFA) model, which measures what percentages of community college students graduate, transfer, or remain enrolled six years after enrolling. In 2021, 64% of students who enrolled in the cohort of 2015 met this metric.

In 2012, Massachusetts' community colleges, state universities, and UMass system began collaborating through the MassTransfer program, which creates and facilitates transfer pathways for students among these institutions. A 2022 study found that this program substantially increased the likelihood that community college students transfer to a four-year institution. At the same time, the study found that *only* higher income students were, on average, more likely to transfer as a result of this program; it reports no increase in the transfer rate of lower-income students.

In terms of employment and earnings outcomes, the picture shows clearer benefits from attending two-year colleges in the Commonwealth: a 2021 **study** found that Massachusetts students who attended community college were 6 to 18 percentage points more likely to be employed than peers who finished their educational attainment with a high school diploma. Earning an associate degree or credential from a community college was associated

with increased earnings of \$1,550 for women and \$5,500-\$9,000 for men.

Low levels of on-time completion are noteworthy both because they suggest that students are not receiving the education they need on the timeline they were promised and because students are likely taking on larger debt burdens as a result, **especially in four-year programs**. Students who require extra time to complete college often must take on additional debt; as one Education Reform Now report puts it, "for students 150% regular time essentially means 150% regular price." According to the National Center for Education Statistics, the average cumulative debt borrowed among students nationwide who completed their program in the 2017-2018 academic year was \$16,800 for public, two-year institutions, versus \$26,100 for public, f our-year institutions. Students in the same cohort at private, two-year institutions accumulated \$26,600 in debt; at private, four-year institutions, \$35,700.

Some of these students will take out substantial debt and *still* not graduate. For these students, the extended timeline and low graduation rates at many of Massachusetts' institutions of higher education will mean **debt but no degree**, a worst-case scenario in which their time in college causes financial harm and time out of the workforce without conferring a meaningful improvement to their employability or later life outcomes.

As in K–12 education, these outcomes show large disparities by race. At Massachusetts' community colleges, both Latinx and Black students have lower rates of on-time credit accumulation and retention after the first year than their white peers. At state universities, Black and Latinx students have substantially lower graduation rates than white students, with an especially large gap for Latinx students. In 2018, Education Reform Now reported in No Commencement in the Commonwealth that "while Massachusetts' four-year graduation gap between White and Black students is the third best in the nation, its White-Latino graduation gap is 37th worst out of all 50 states and the District of Columbia." These persistent gaps reinforce inequities present in Massachusetts' K–12 schools and place Black and Latinx students at a financial and employment disadvantage.

National Context

The national higher education landscape is characterized by many of the same trends seen in Massachusetts. Overall college matriculation is **declining**, even as the cost of attendance has increased and average student loan debt has continued to grow, more than doubling since 2007. In 2020, the American Association of Community Colleges reports that the "150% of 'normal time'" (completion in 3 years for a 2-year program) was only 26.6%. Regarding transfer rates, the National Student Clearinghouse reports that 32% of U.S. community college students transfer to four-year institutions. 43.6% of transfer students earn a certificate or associate degree before transferring; 49% of them complete their bachelor's degree within six years of starting community college. In terms of student debt, Black students are both more likely to borrow and more likely to borrow more—an average of \$39,600 in the 2015-2016 school year, versus \$29,900 among white peers.

- Debt relief: In August 2022, President Biden announced a three-part plan aimed at relieving student debt via executive action. The centerpiece of the plan is a one-time loan forgiveness of up to \$10,000 for most federal loan borrowers with incomes up to \$125,000, or up to \$20,000 for Pell grant recipients. Additionally, the Biden administration plans to cut monthly payments on undergraduate loans to 5% of a borrower's discretionary income and ensure that eligible borrowers receive appropriate credit toward loan forgiveness via the Public Service Loan Forgiveness (PSLF) plan. Finally, the Department of Education announced plans to publish a "watch list of the programs with the worst debt levels in the country" among other actions aimed at increasing higher education institutions' accountability for student completion and success. Multiple states and private entities have filed suit to halt the plan, and the 8th Circuit Court of Appeals ruled in favor of one such lawsuit in November: as of December 2022, the Supreme Court has said it will consider the case in 2023.
- Race-conscious admissions: The U.S. Supreme Court has repeatedly considered the question of whether institutions of higher education may consider a prospective student's race in the admission process, and if so, under what circumstances. In 2003, the Court ruled in *Grutter v.* Bollinger that universities may consider race in order to promote campus diversity. More recently in 2016, the Court decided in Fischer v. University of Texas that the university's consideration of race within the context of holistic admissions did not violate the U.S. Constitution. In its 2022–2023 sitting. the Supreme Court is again considering the constitutionality of race-conscious admissions in higher education, with lawsuits seeking to overturn the practice at Harvard University and the University of North Carolina.
- Legacy preferences: Massachusetts is one of just five states where a majority of public institutions of higher education offer a legacy preference, meaning that an admissions advantage is given to the children of alumni. Three-quarters of Americans oppose the use of legacy preferences, and many institutions have stopped using the practice in recent years. In 2021, Colorado banned public colleges and universities from using legacy preferences; a similar bill is under consideration in New York and federally before the U.S. Congress.
- Expanding data collection and accountability: The U.S. Department of Education collects annual data on enrollment, finances, degree completion, and other key metrics from all institutions of higher education that receive federal funding. The Integrated Postsecondary Education Data System (IPEDS) gathers admissions data, but only enrollment data is disaggregated by race and ethnicity. In 2013, the Obama administration initially proposed a college rating system to aid students in choosing higher education institutions with strong outcomes; in 2015, the Department of Education released a scorecard website.

State of Research

Education Reform Now publishes research on a wide range of higher education topics, including the prevalence and impact of legacy admissions, the social mobility that institutions offer students, college affordability, access, and outcomes.

In general, research suggests that access, affordability, and time to completion remain significant barriers to many students in achieving success in higher education. The **Urban Institute** finds that most students will see a "substantial economic (and personal) return" on their decision to attend a higher education institution, but that the likelihood and size of this positive return can depend in large part on the student's preparation, the college chosen, and the supports available to help students reach their goals.

Appendix: Enrollment, Tuition, and Fees For Each Institution

Institution	Category	Enrollment (Fy22)	Tuition And Fees (Fy22)
Berkshire Community College	Community College	771.8	\$6,750
Bristol Community College	Community College	3,572.6	\$6,584
Bunker Hill Community College	Community College	5,700	\$6,444
Cape Cod Community College	Community College	1526	\$6,690
Greenfield Community College	Community College	773.1	\$7,022
Holyoke Community College	Community College	2,163.8	\$6,650
Massachusetts Bay Community College	Community College	2,281.2	\$6,720
Massasoit Community College	Community College	3,449.2	\$6,450
Middlesex Community College	Community College	3,638	\$7,560
Mount Wachusett Community College	Community College	1,888.2	\$7,000
North Shore Community College	Community College	2,841	\$6,790
Northern Essex Community College	Community College	2,602	\$7,010
Quinsigamond Community College	Community College	4,030.3	\$7,060
Roxbury Community College	Community College	646.3	\$7,330
Springfield Technical Community College	Community College	2,510.8	\$6,846

Institution	Category	Enrollment (Fy22)	Tuition And Fees (Fy22)
Bridgewater State Univ.	State Univ.	8,446.6	\$10,732
Fitchburg State Univ.	State Univ.	4,991.8	\$10,654
Framingham State Univ.	State Univ.	4,037.4	\$11,380
Mass. College of Art and Design	State Univ.	1,740.6	\$14,200
Mass. College of Liberal Arts	State Univ.	926.8	\$11,306
Mass. Maritime Academy	State Univ.	1,767.2	\$10,516
Salem State Univ.	State Univ.	5,917.6	\$11,674
Westfield State Univ.	State Univ.	Not reported (4,790.7 in FY21)	\$11,140
Worcester State Univ.	State Univ.	4,506.4	\$10,586

Institution	Category	Enrollment (Fy22)	Tuition And Fees (Fy22)
UMass Amherst	UMass System	32,229	\$16,440
UMass Boston	UMass System	15,586	\$14,718
UMass Dartmouth	UMass System	7,470	\$14,410
UMass Lowell	UMass System	17,342	\$15,698
UMass Medical School	UMass System	1,301	\$69,558 (MA resident)

More Information

On national-level metrics of higher education access and affordability:

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- "Higher-Ed Quality and Affordability." Education Reform Now. Link.

On state-level higher education access and affordability in Massachusetts:

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Appendix

Education Performance Over Time

Massachusetts' students and schools have made extraordinary progress since 1993, fueled by the essential combination of more funding, rigorous standards, and a strong accountability system, all while the state's demographics were changing.

Massachusetts' education reform success shows that demographics are not necessarily destiny. At the same time, they show that opportunity gaps remain wide in the Commonwealth, requiring further effort toward equity.

Massachusetts' model of education policy has yielded strong results for the Commonwealth.

National acclaim for our top-ranked education system.

In 1993, Massachusetts schools ranked in the middle of the pack nationally. Today, the Commonwealth has secured its place as the country's education leader.

Massachusetts consistently near the top of the country on the nation's report card.

The National Assessment of Educational Progress is the largest nationally representative and continuing assessment of what America's students know and can do in various subject areas. Massachusetts students (both 4th graders and 8th graders) were the top scorers in both reading and math in 2011, and the state's scores increased in both subjects between the 1998/2000 iterations of the test and 2019. The 2019 scores, however, were lower than the 2017 scores, and this decline continued in 2022. In 2022, Massachusetts' average scores were lower than Wyoming's in 4th grade math and New Jersey's in 8th grade reading.

The state's dropout rate decreased by nearly 50%.

Between 1994 and 2021, the statewide annual dropout rate dropped from 3.7% to 1.5% (indicating that standardized tests do not cause students to drop out, as those opposed to the use of standardized tests assert).

Graduation rates are up across the board.

Between 2006 and 2021, the state's four-year graduation rate rose steadily from 80 to 90%. This means about 7,348 students graduated in 2021 who would not have graduated under 2006's graduation rate. Furthermore, the state's accountability system, with its requirement that students pass MCAS to graduate with a high school diploma, does not prevent large numbers of students from doing so. During the August 2022 meeting of the Board of Elementary and Secondary Education, a DESE representative estimated that roughly 1% of each graduating cohort meets local requirements for graduation, but does not meet the MCAS requirement, thus receiving a certificate of attainment (per district policy) instead of a diploma.

Cities see even greater graduation rate gains.

Improvements are even more marked in Gateway Cities and other urban centers over the same period.

Boston, Chelsea, Holyoke, Springfield, Fall River, and Revere all saw their graduation rates rise by 25 percent or more between 2006 and 2021. Springfield's increased by 64%.

In Lawrence, the graduation rate has increased by more than 50% during state receivership.

The city's graduation rate moved from 46.7% graduating in 2010 (the year before Lawrence went into state receivership) to 78.5% in 2021. Test scores are also up across the board, but especially for Latinx students. State intervention in Lawrence constitutes one of the Gov. Deval Patrick administration's most dramatic public policy successes.

Commonwealth public charter schools provide a national model of excellence.

Two studies by Stanford University's Center for Research on Education Outcomes in 2013 and 2015 showed that Commonwealth public charter schools are accelerating the pace of learning at a rate not seen anywhere else in the country. A 2016 Brookings Institution study found that one year in a Boston charter school "erases roughly one third of the racial achievement gap."

Commonwealth public charter schools consistently outperform district schools.

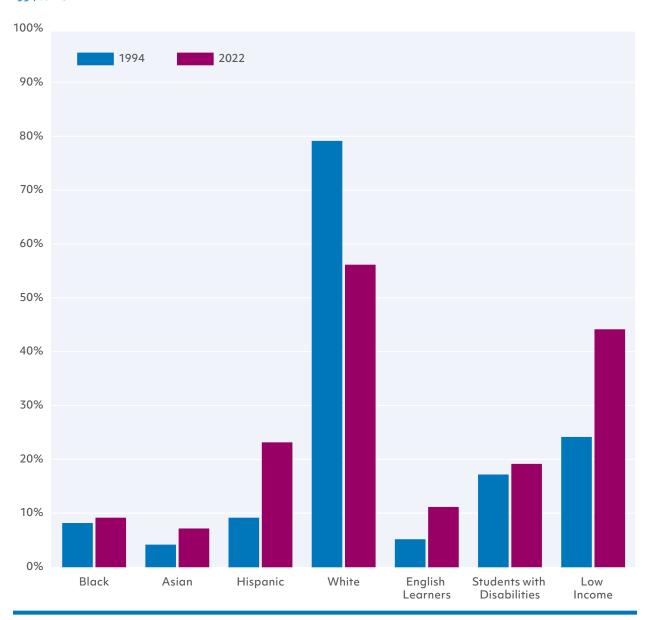
Across the state, Commonwealth public charter schools are closing the achievement gap between low-income, African American, and Latinx children and more affluent, white children. After the first Commonwealth public charter school opened in 1995, demand by families has been so strong that Democrats in the legislature lifted the cap in 1997, 2000, and 2010.

Improvements in education outcomes occurred as the student population grew more diverse.

In 1994, 79% of public school students in Massachusetts were white, 8% were Black, 9% were Latinx, 4% were Asian, 12% did not speak English as their first language, and 24% were low-income. The demographics of students in the 2022–2023 school year are notably different: 56% are white, 9% are Black, 23% are Latinx, 7% are Asian, 24% speak a language other than English as their first language, and 56% qualify as high needs.

Demographics

1994 vs. 2022



Source: MA School and District Profiles, DESE

The academic achievement of Massachusetts students has dramatically increased as the state has grown more diverse, educating increasingly larger numbers of children who have historically lagged behind their peers. At the same time, the persistence of opportunity gaps in Massachusetts

points to the need for a renewed commitment to pursuing equity in the Commonwealth.

Produced in collaboration with:

