

THE TEACHER WORKFORCE IN MASSACHUSETTS: FAST FACTS

77,630
TEACHERS¹

2.40% of the National
Teacher Workforce²

¹Source²Source

11.8¹
STUDENT
PER TEACHER
RATIO²

¹Source²Source

National Average: 14.8:1
(2020-2021)

Student-Teacher
Ratio Rank

#6

*Includes
D.C.

Research indicates that teachers are the most important school-based factor for student growth and achievement. Students taught by highly effective, excellent educators are more likely to graduate from high school, attend college, be employed, and earn higher wages.

Extensive research has also found that a diverse educator workforce is beneficial to all students, but especially students of color. When students are taught by an educator who reflects their racial identity, their test scores improve in both math and reading in early grades, and they are less likely to face exclusionary discipline practices and more likely to attain a postsecondary credential or degree.

Thus, as access to excellent and diverse teachers is crucial for the academic achievement and success of all students, it is essential for policymakers to ensure that teacher preparation, compensation, and evaluation policies and practices support the recruitment and retention of an educator workforce that is both excellent and diverse.

ONE MILLION TEACHERS OF COLOR

Launched by The Hunt Institute and TNTP, the One Million Teachers of Color campaign has a goal of adding one million teachers of color and 30,000 leaders of color to the education workforce over the next decade. Our campaign is made up of leaders from the education sector and beyond, united in the belief that when education systems are designed to honor the humanity of teachers and school leaders of color, students and our entire society benefit. As a growing body of research indicates, when education systems recruit and retain teachers and leaders of color, all students, particularly students of color, benefit. Together we seek to amplify the unique strengths, skills, and lived experience that teachers and leaders of color bring in support of all students.

Additional partners in the campaign include the Center for Black Educator Development, EdTrust, Latinos for Education, Men of Color in Educational Leadership, New Leaders, and Teach Plus.

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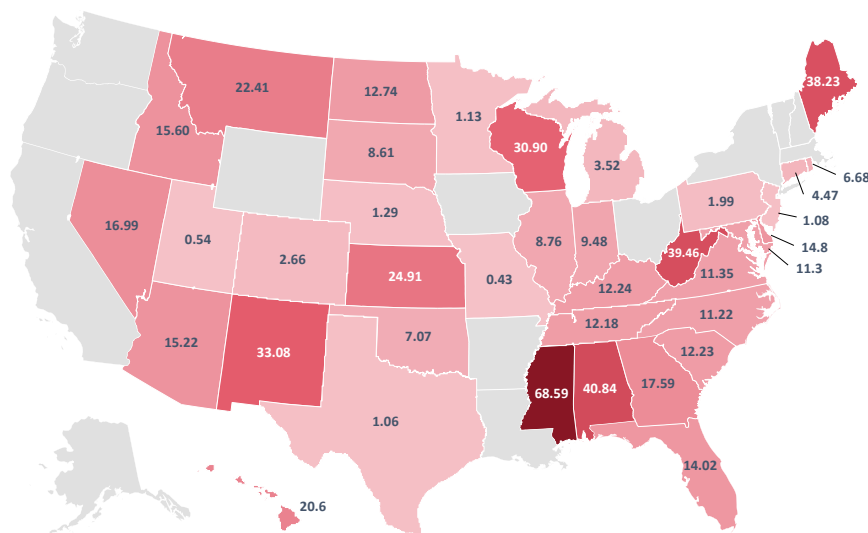
THE STATE OF
TEACHER SHORTAGES

While teacher shortages have been a concern across the country, the nature and severity of shortages varies across school locations and types, subject areas, and teacher demographics. However, a common thread throughout the landscape of shortages is the disproportionate impact on low-income students and students of color.

Rural Districts and
Schools

Rural communities often experience [difficulties](#) recruiting and retaining teachers. In particular, [research](#) shows that low-income rural public schools lose almost 28 percent of their teachers each year, a higher rate of turnover than low-income schools in urban districts. One challenge is teacher salaries; while some might note that cost-of-living is lower in rural communities, compensation for teachers in rural areas remains [lower](#) than in other geographic areas even after adjusting for cost-of-living differences. [Other factors](#), such as high transportation costs and limited housing, can create additional barriers.

NUMBER OF TEACHER VACANCIES PER 10,000 STUDENTS, BASED ON MOST RECENT STATE DATA



Source

*Data is not available for the states in gray.

Additionally, there were roughly [100,000 unfilled job openings](#) for STEM educators in high schools across the country as of 2018. In middle schools, the number of unfilled openings increases to 150,000. Historically, leaders have cited barriers like location, respect for the teaching profession, lucrative alternative STEM careers, and fewer students pursuing teaching careers as barriers to hiring STEM teachers. These shortages disproportionately impact low-income schools, students of color, and students in urban and/or rural schools.

In fact, [more than half](#) of public school districts, and more than 90 percent of districts serving large populations of Black and Hispanic students reported difficulties recruiting and retaining STEM teachers.

Special Education and Science,
Engineering, Math, and
Technology (STEM)

Of schools reporting at least one teacher vacancy for the 2021-22 school year, [43 percent](#) of these schools reported a vacancy in special education, making this the area of highest need. This need is only expected to grow as the number of special education students continues to [increase](#) each year. Filling vacant special education teaching positions also includes unique regulatory challenges, as the Individuals with Disabilities in Education Act [prohibits](#) states from waiving certification or license requirements for special education teachers and related services personnel on an emergency, temporary, or provisional basis.



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Diverse Teachers

Nationally, the teaching profession is largely white and female, a trend that has been persistent; over the last 30 years, the percentage of teachers who are women has increased and while the profession has become slightly more diverse, the percentage of Black teachers has declined. Educators of color experience significant barriers both before and throughout their professional careers, making it more difficult for these individuals to enter or stay in the teaching profession. The nature and structure of these barriers is outlined in the next section.

Barriers to Recruiting & Retaining a Diverse Educator Workforce

Postsecondary Completion

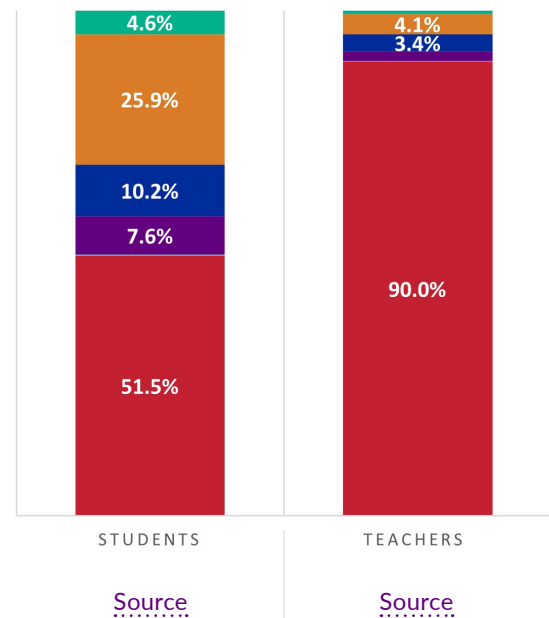
Due to barriers faced by people of color that begin long before college or other educator preparation programs, students of color experience lower enrollment and graduation rates from postsecondary institutions, making diverse educator recruitment difficult. Growing up, students of color are more likely to attend schools where the majority of students are also low-income or of color. These schools tend to be underfunded, have fewer qualified educators, and sparse educational offerings, reducing the likelihood these students will matriculate to college. Low-income and students of color who do attend college are more likely to be enrolled in remedial courses, delaying their graduation and thus increasing the cost of their education.

Educators of color, particularly Black educators, are more likely to have financed their college education through student loans, causing them to carry more debt. Therefore, students of color and low-income students, who often lack generational wealth or may be supporting additional family members, take on additional risks when attending college, likely leading them to pursue more financially lucrative careers.

Discrimination

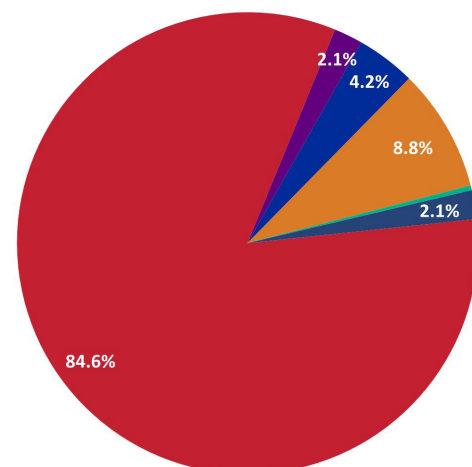
Studies have shown that educators of color report higher levels of discrimination, microaggressions, and other forms of racism while on the job compared to their white coworkers. In one study, educators of color in predominantly white school settings were more likely to receive lower evaluation scores, which may lead educators of color to leave their schools for other opportunities.

STUDENT DIVERSITY VS. TEACHER DIVERSITY IN MASSACHUSETTS | 2022-2023



■ American Indian/Alaska Native
 ■ Asian
 ■ Black
 ■ White
 ■ Hispanic
 ■ Two or More
 ■ Pacific Islander

EDUCATOR PREPARATION PROGRAM (EPP) ENROLLMENT IN MASSACHUSETTS, BY RACE AND ETHNICITY | 2020-2021



■ American Indian/Alaska Native
 ■ Asian
 ■ Black
 ■ White
 ■ Hispanic
 ■ Two or More
 ■ Pacific Islander

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Educators of color working in majority-white schools are also prone to heightened feelings of isolation. In fact, [an assessment](#) conducted by Minneapolis Public Schools in 2018 found that educators of color reported feeling vulnerable, excluded, and unwelcomed in their schools. The same assessment also highlighted that educators of color felt they would be risking their jobs by expressing their frustrations or attempting to address inequities within their schools.

The Invisible Tax

The [invisible tax](#) is levied on educators of color when they are expected to take on additional duties related to their race or ethnicity, such as serving as Diversity, Equity, and Inclusion experts within their schools. Teachers who speak more than one language may be required to translate documents or liaise with families that do not speak English, often for no additional compensation. Black male educators, who are already [underrepresented](#) in the education profession, report spending [more time mentoring and counseling students](#) than teachers of any other demographic, and often have to serve as disciplinarians to students of color in their schools as well. [Studies](#) have shown that this time spent on discipline, cultural competence, and equity means that when principal and superintendent positions are available, Black teachers who aspire to these roles are at a disadvantage because they have not had instructional leadership opportunities.

Teacher Shortage Considerations for Policymakers

The following questions reflect crucial considerations for best practices to address shortages in the educator workforce:

Consideration #1: Does my state have a diversified salary structure to target filling high-needs positions?

When [implemented](#) in conjunction with a sufficient base salary, differentiated pay based on teaching in a subject shortage area and/or at a high-needs school has been found to reduce teacher turnover and improve retention. In particular, research has found that:

- In [North Carolina](#), a study showed that paying math, science, and special education teachers in high-poverty schools \$1,800 bonuses (about \$2,500 adjusted for inflation) reduced teacher turnover by 17 percent. The researchers said that teachers weren't always well informed about the program so their estimates might actually understate the value of the program.
- Teacher turnover was reduced in [Florida](#) by nearly a third when teachers with satisfactory performance ratings in shortage subjects received a bonus of \$1,200 (close to \$2,000 in today's dollars).
- A study of [Georgia's](#) bonus system for math and science teachers found that teacher attrition was reduced by 18 to 28 percent.
- [Hawaii](#) cut the number of special education teaching positions that were either vacant or filled with unlicensed educators in half by offering a \$10,000 pay raise.
- As of December 2022, [27 states](#) require or explicitly encourage additional pay for teachers working in subject shortage areas and/or high-needs schools.



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Consideration #2: Does my state offer non-salary benefits and incentives specific to high-needs positions?

[Research](#) has shown that loan forgiveness and service scholarship programs can successfully recruit and retain high-quality teachers into classrooms and communities where they are most needed. Student loan forgiveness has also been found to be [particularly effective](#) in recruiting teachers of color. Thirty-seven states and the District of Columbia have at least one [scholarship program](#) for teachers who commit to teach in underserved schools or shortage subject areas and 25 states have a [loan forgiveness program](#) for the same purpose.

In order to mitigate the financial burden of licensure testing, including preparation, states have begun offering support for these costs to teacher candidates who will fill positions in state shortage areas, including:

- Oregon's [Diversity License Expense Reimbursement Program](#) provides reimbursement for costs associated with licensure and assessments for racially, ethnically, and/or linguistically diverse teachers, administrators, and personnel service candidates, as well as for current racially, ethnically, and/or linguistically diverse teachers, administrators, and personnel service providers renewing licenses or adding endorsements or specializations to their licenses.
- New Jersey passed [legislation](#) in 2021 to increase transparency around and support for teacher licensure fees, including a requirement for educator preparation programs to pay the cost of licensure tests for candidates preparing to teach in a shortage area.

Consideration #3: Does my state encourage and invest in innovative approaches to diversify the teacher workforce?

As noted above, research makes clear that teacher diversity matters, especially for students of color. It is therefore critical that states encourage teacher preparation programs to recruit, adequately prepare, and graduate more teachers of color. Setting goals for doing so is one approach. Similarly, launching programs or initiatives that lower the barrier to entry to teaching

by reducing costs or providing paid residencies while candidates are still working towards their credentials can increase diversity. For example, in 2016 Portland Public Schools (PPS) in Oregon partnered with Portland State University (PSU) to create the PPS & PSU [Dual Language Teacher Partnership](#) to increase the district's number of bilingual teachers. Program applicants must hold a bachelor's degree, pass a language fluency test, and gain admission to one of the school's education programs. Once accepted, they are employed as either lead teachers, substitutes, or paraprofessionals while working on their graduate coursework. A year into the program, the district had placed teachers in all its open bilingual education positions.



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TEACHER PREPARATION

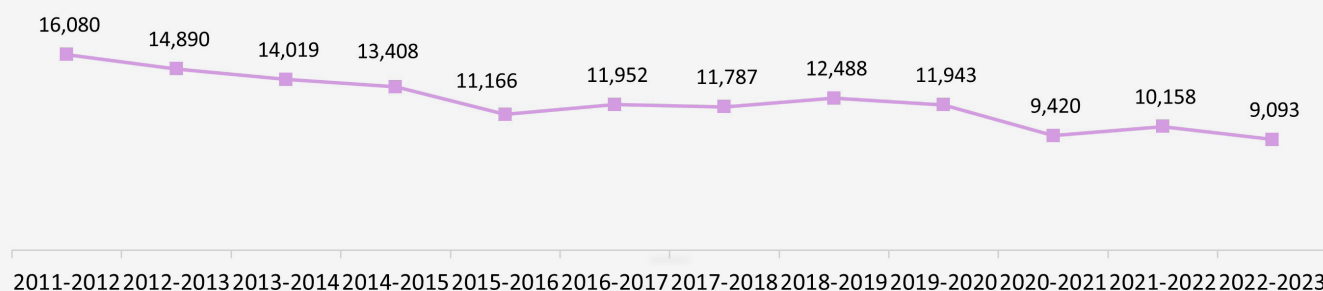
Research shows that teachers who enter the classroom through high-quality teacher preparation programs are more likely to stay in the classroom. Additionally, teacher certification and licensure are positively correlated with student achievement, particularly in math. Since state leaders set standards and requirements for teacher preparation, certification, and licensure, state leaders have an opportunity to support programs that will in turn support students.

Types of Preparation Programs

Traditional Prep Programs

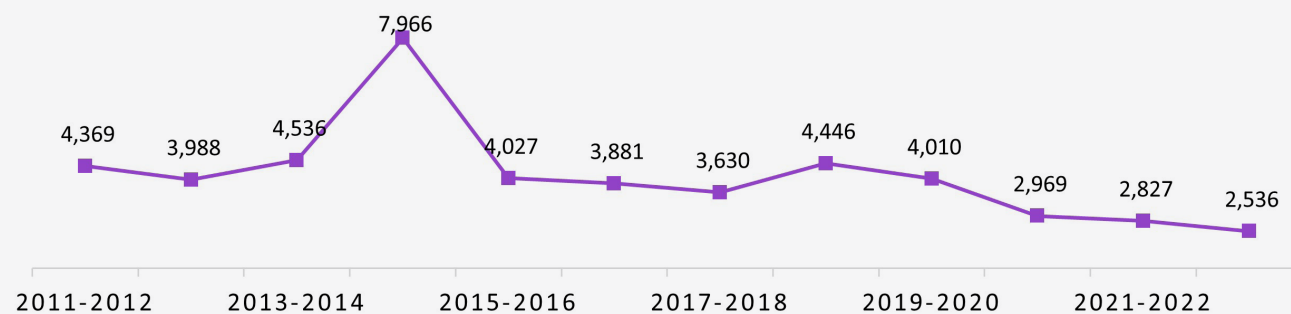
Traditional educator preparation programs are housed in institutions of higher education (IHEs) and lead to candidates receiving their licensure at the end of their four-year degree process. Across the country, 72 percent of preparation programs are traditional. However, while the majority of teachers enter the classroom through traditional programs, the number of enrolled candidates and program completers has generally been in decline over the past several years.

■ TRADITIONAL EDUCATOR PREPARATION PROGRAM (EPP) ENROLLMENT IN MASSACHUSETTS | 2011-2023



Source

■ TRADITIONAL EDUCATOR PREPARATION PROGRAM (EPP) COMPLETION IN MASSACHUSETTS | 2011-2023



Source

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Alternative Preparation Programs

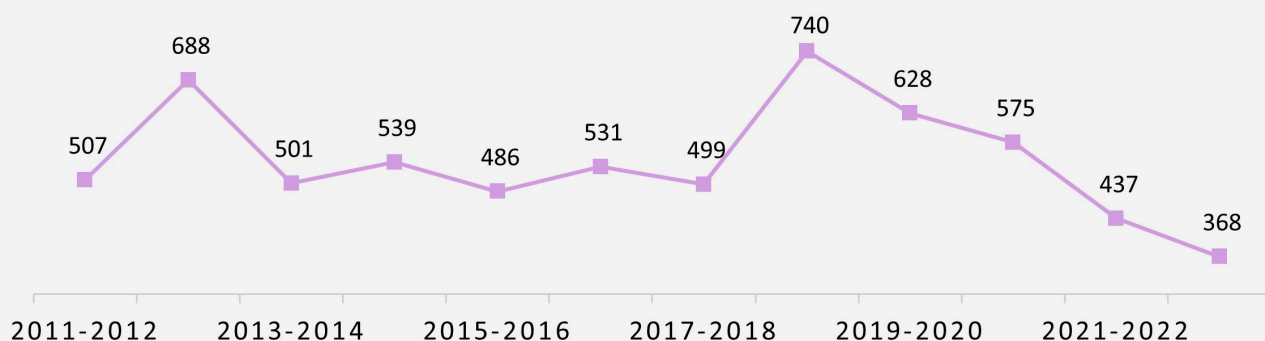
In 2020-21, 24 percent of all teacher candidates completed their training through alternative teacher preparation programs.

So-called “alternative” routes allow individuals who already hold bachelor’s degrees to transition from careers in other fields to teaching through an accelerated process. There are many alternative programs with distinct structures and

processes, though candidates will often begin teaching while taking coursework at a partner university to earn their credential.

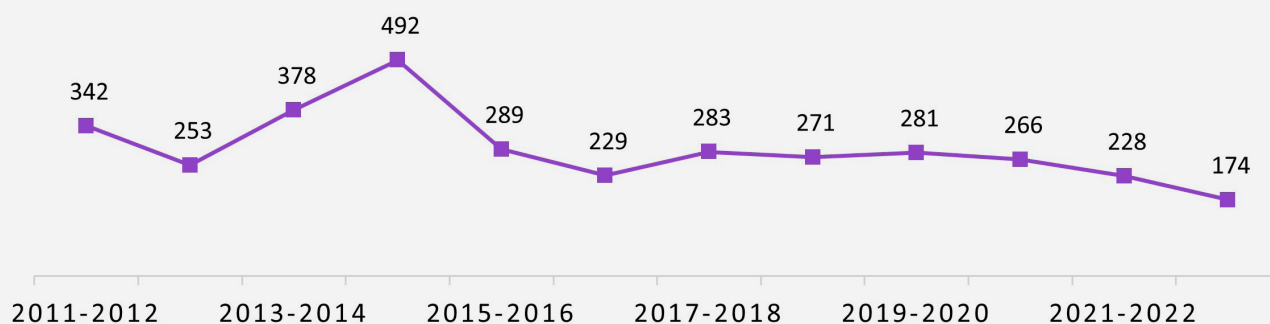
Most research finds little difference in teacher effectiveness based on the program a teacher completes (traditional or alternative). Teachers who complete an alternative program, however, are more likely to transfer schools or leave the profession in their first year than teachers who complete traditional programs.

■ ALTERNATIVE EDUCATOR PREPARATION PROGRAM (EPP) ENROLLMENT IN MASSACHUSETTS | 2011-2023



Source

■ ALTERNATIVE EDUCATOR PREPARATION PROGRAM (EPP) COMPLETION IN MASSACHUSETTS | 2011-2023



Source

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Identifying Best Practices For High-Quality Teacher Preparation

There is variation in more than 2,000 teacher preparation programs across the country. However, they tend to share some common features.

Content Knowledge: What do they teach?

To help students master content, teachers must first master the content themselves. States and preparation providers often take at least one of two approaches to ensure teachers have sufficient content knowledge prior to gaining licensure:

1. Requiring a major/minor in the subject they plan to teach.

Four states [require](#) prospective elementary teachers to have a subject-area bachelor's degree for initial licensure. In addition, 12 states require a subject-area bachelor's degree for middle and/or secondary school teachers. Many alternative programs also require candidates to have bachelor's degrees in the subject area they seek to teach.

2. Requiring a passing score on a content-knowledge exam.

All states have some requirement of content testing before licensure, depending on grade, subject, and academic major. Several states have developed their own tests, but most states use the Praxis II Subject Assessments to assess content knowledge. [States](#) set

the required subject assessment and passing cut score, so it differs across the country. Several states also require teachers to take the [edTPA](#) test, a performance-based assessment, to assess a teacher's ability to plan and teach a lesson.

Pedagogy: How do they teach?

Content knowledge is only part of what a teacher must learn. Preparation programs are also responsible for developing the skills necessary to teach in a classroom, including effective ways to relay information, manage a classroom, and assess student understanding.

There are various ways to teach pedagogy, but research suggests that teacher candidates who participate in student-teaching experiences with rigorous oversight or who were required to complete a practice-based capstone project were [more effective](#) in their first year of teaching. However, each state determines its own requirements for student teaching and length of experience, and requirements for partnering teachers vary.

[Most states](#) also provide some sort of mentorship program in a teacher's early years, where a beginning teacher receives support from a designated and more experienced mentor teacher. The requirements for mentorship programs vary widely. The [most effective](#) induction programs are at least two years long and provide new teachers with carefully-selected and well-prepared mentors who teach in the same content area as they do. Mentorship programs [reduce](#) turnover rates and accelerate the professional growth of inexperienced teachers — leading to better student outcomes.

APPRENTICESHIP & RESIDENCY PROGRAMS

[Teacher apprenticeships](#) combine coursework and on the job experience in an attempt to reduce the cost of earning a teaching degree while providing candidates with crucial time in the classroom during their preparation. Apprentices also earn a wage for their time in the classroom and ultimately end up with a degree and/or license in teaching. Apprenticeship programs are generally an expansion of the teacher residency concept, which provides teaching candidates with the opportunity to work alongside a mentor teacher for at least one year before becoming the teacher of record. Teacher residencies tend to attract people of color at [high rates](#) when compared to the national teacher population, and teachers prepared through residency programs tend to stay in the classroom [longer](#) than those who are not.

In January 2022, Tennessee launched the Teacher Occupation Apprenticeship and became the [first state](#) to establish a teacher apprenticeship program approved by the U.S. Department of Labor. Being recognized as a Registered Apprenticeship Program with the Department of Labor opens up the Teacher Occupation Apprenticeship to federal funding opportunities, allowing the program to [leverage](#) both state and federal dollars to create a sustainable funding stream. As of 2024, over [21 states](#) offer registered teacher apprenticeship programs.

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TRADITIONAL VS. ALTERNATIVE PREPARATION PROGRAMS IN MASSACHUSETTS

■ TYPES OF PROVIDERS

TRADITIONAL PROVIDERS BASED AT INSTITUTIONS OF HIGHER EDUCATION (IHES) (Source)

Teacher education programs housed in schools of education at colleges and universities around the state. Teachers earn a bachelor's degree and are eligible for licensure upon graduation.

48

86% of Massachusetts's educator preparation programs.

ALTERNATIVE PROVIDERS ATTACHED TO IHES (Source)

Nontraditional licensure programs based at IHEs.

0

0% of Massachusetts's educator preparation programs.

ALTERNATIVE PROVIDERS NOT ATTACHED TO IHES (Source)

Any other preparation program not based at an IHE. Often these are created by districts, nonprofits, or state agencies.

8

14% of Massachusetts's educator preparation programs.

TEACHER RESIDENCY PROGRAMS (Source)

Year-long, practice-based training programs in which aspiring teachers work and learn alongside experienced teachers in the classroom. Residents earn a stipend and are eligible for licensure upon completion.

Not identified in state policy. However, the legislature appropriated funding for the Boston Teacher Residency Program in 2021.

TEACH FOR AMERICA (Source)

Nontraditional teacher training program designed to recruit college graduates to teach in high-needs schools. After a summer training, teachers take coursework towards licensure while employed by local schools.

TFA places corps members in Greater Boston, Western Massachusetts, and Southcoast Subregion.

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Educator Preparation Considerations For Policymakers

Each state will have different needs and therefore different solutions; still, policymakers can consider the following policy levers:

Consideration #1: How can my state hold teacher preparation programs accountable?

Despite the importance of educator quality, there is little accountability for teacher preparation programs to produce excellent teachers.

Nationally, more stakeholders are asking who enters and completes teacher preparation programs in an effort to encourage and support a more diverse teaching corps. Hence, as states consider how to improve teacher preparation, it is important to consider the full range of goals they have for preparation programs and how they can measure success against those goals.

Consideration #2: How do my state teacher preparation programs align with other efforts to recruit and retain high-quality diverse educators?

Preparation is one factor that influences whether potential candidates decide to become a career teacher. Others include compensation, working conditions, and evaluation measures. Where teacher preparation programs look for candidates and what qualities programs prioritize also have an impact on who enters the profession. States should ensure that their teacher preparation programs and effectiveness measures are aligned with other policies and programs aimed at recruiting and retaining excellent teachers.

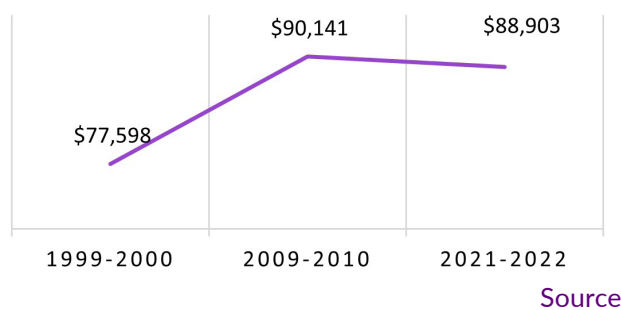


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TEACHER COMPENSATION

States all use a salary schedule to determine teacher pay. However, states or districts may offer various bonuses, which are sometimes tied to performance for teaching in hard-to-staff schools or hard-to-staff-subjects.

CHANGE IN MASSACHUSETTS TEACHER SALARY OVER TIME*



-1.4%

Change in average teacher salary in
MASSACHUSETTS
from 2009-10 to 2021-22

*In constant 2021-22 dollars



TEACHER SALARY SYSTEMS | AN OVERVIEW

TYPE	DEFINITION
Step-and-lane	Teachers are paid based on a combination of years of experience and education level (most common).
Pay-for-Performance	Teachers receive bonus pay for achieving a preferred outcome, such as high student growth on standardized assessments.
Strategic Staffing/ Market-Based Pay	Teachers receive additional pay to work in hard-to-staff schools and/or content areas.
Career Ladder	Teachers receive additional pay to take on additional classroom or administrative responsibilities.

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Research has shown that teachers become more effective as they gain more experience, and step-and-lane systems typically provide small increases each year. However, research also shows that improvements in effectiveness do not typically happen in a linear fashion across the span of a teacher's career. Rather, studies show the largest gains in student achievement occurs during a teacher's first five years in the classroom.

Small incremental pay increases also mean that few teachers reach their top earning potential. over 44 percent of teachers leave the classroom within their first five years of teaching, an attrition rate that is much higher than is seen in other highly regarded professions, such as law and engineering.

Step-and-lane systems typically pay teachers more for the more education they have, despite evidence that more teacher education does not lead to higher student achievement. However, certification from the National Board for Professional Teaching Standards correlates with better student outcomes. Teachers earn National Board Certification by participating in an assessment based on the National Board Five Core Propositions and Standards, which describe what accomplished teachers should know and be able to do to have a positive impact on student learning.

MASSACHUSETTS SALARY SCHEDULE

TOPIC	DESCRIPTION
<i>What type of salary schedule does Massachusetts use?</i>	The state mandates a minimum salary but allows districts to determine the remainder of the schedule.
<i>Does Massachusetts provide a subject shortage area bonus?</i>	No policy.
<i>Do teachers in Massachusetts receive bonuses for achieving National Board Certification?</i>	No policy.
<i>Do teachers in Massachusetts receive bonuses for teaching in high-needs schools?</i>	No policy.

Source

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Deferred Compensation

Some argue that teachers are compensated for lower earnings during their careers due to generous pension packages. On average, pensions make up 7.4 percent of benefits packages for public sector employees, including teachers, compared to 3.1 percent of benefits packages in the private sector. However, on average, less than half of teachers ever receive any pension benefits because they leave before they are eligible. Additionally, even considering the generous pension and benefits, some teachers earned compensation packages are worth 13 percent less than that of their peers with similar experience and employed in comparable fields. That disparity increases when considering wages alone; teacher salaries are approximately 21 percent less than the salaries others receive in comparable fields after controlling for education and experience.

Additionally, state retirement systems, including those supporting teacher pensions, have large (and growing) unfunded liabilities. Nationally, total unfunded liabilities

for state and municipal plans have increased from \$248.8 billion in 2007 to an estimated \$1.45 trillion in 2022.

To reduce future debt growth, many states have passed pension reforms, including reducing benefits for new hires, increasing the amount teachers must contribute, and/or reducing cost of living adjustments. A handful of states have also made systemic changes, providing alternatives to defined benefit plans. The table below describes three of the most common alternatives.

Some advocates for these alternative retirement plans point to shorter vesting periods or increased portability as effective ways to ensure teachers who leave the profession or move across state lines can still benefit. However, defined benefit pensions often serve as a retention tool, providing a rich reward for dedicated teachers. The role that retirement benefits play in a teacher's decision to stay in the field—or even enter the field to begin with—varies across cohorts and demographics, which is why including teachers' perspectives in decisions around retirement benefits is crucial.

■ ALTERNATIVE RETIREMENT PLANS

ELEMENT	DESCRIPTION
Defined Contribution	The employee and employer make regular (defined) contributions in an individual account, which is then invested (usually through a professionally-managed portfolio). The total value of the benefit depends on both the amount contributed and how the portfolio performs over time.
Defined Benefit/Contribution Hybrid	Employees are simultaneously enrolled in both a defined benefit plan with a smaller benefit amount and a defined contribution plan.
Cash Balance	Like defined contribution plan, the employee and employer make contributions to an individual account, but the account is managed in a combined fund with all other employees and guaranteed a minimum annual return plus some share of returns above that benchmark.



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Teacher Compensation Considerations For Policymakers

Policymakers may consider the following questions when thinking about compensation reforms:

Consideration #1: Does my state have a system in place that can reliably identify our most effective teachers?

If states or districts want to implement a pay-for-performance model, they first need to know who their most effective teachers are. Hence, having a reliable evaluation system is key. Even so, states and districts will need to consider how much to reward teachers, weigh the pros and cons of individual versus school-wide performance pay, and determine how to ensure the compensation is fair (and that educators view it as such).

Consideration #2: Does my state have adequate buy-in from teachers and other stakeholders?

Stakeholder support is critical to compensation reforms. The best way to build support among teachers is to include them in the development and design of the model. It should be noted that teacher attitudes

regarding compensation are changing. Surveys show that younger teachers view options like performance pay more favorably than their older peers, suggesting new opportunities for compensation reform.

Consideration #3: Do we have adequate and stable funding?

Whether designed by the state or districts, ensuring adequate and stable funding is critical to sustaining stakeholder buy-in. Some programs have quickly lost teacher and school district support because of poor budget management. Historical data can assist with the determination of incentive eligibility guidelines and the likely cost to states and districts.

Consideration #4: How is the state balancing salary and benefits?

States face no shortage of tough decisions related to teacher compensation; relatively low salaries undermine recruitment while rising pension debts are threatening long-term financial health. As states and districts determine their next steps with respect to compensation, it's important to weight the balance of various factors.

MEASURING TEACHER EFFECTIVENESS

Students who have access to a high-quality teacher not only achieve higher academic outcomes but are also more likely to enroll in a postsecondary program and earn higher salaries. Additionally, evidence shows that teachers who are able to improve students' social and emotional skills, as opposed to solely focusing on standardized test scores, have an even greater positive impact on student academic achievement and graduation rates.

Although it is clear that strong teachers are essential for student achievement, identifying and measuring teacher effectiveness has proven difficult.

The previous generation of teacher evaluation systems

used a binary “satisfactory” or “unsatisfactory” rating that did not provide detailed information about a teacher’s strengths and weaknesses. These systems can also signal that there is little room for improvement. According to TNTP’s 2009 report, The Widget Effect, more than 99 percent of teachers received a satisfactory rating under this type of binary evaluation system.

The federal Race to the Top competitive grant included incentives for states and districts to adopt more robust teacher evaluation systems. Similarly, the Elementary and Secondary Education Act (ESEA) flexibility waivers encouraged states to develop evaluation systems that included multiple performance levels, required more frequent evaluations, and incorporated multiple measures, including student growth. These efforts resulted in a flurry of changes to educator evaluation systems nationwide.

Those incentives ended with ESEA’s most recent reauthorization in 2015, however. As of 2022, 30 states require student growth data to be included in teacher evaluations.

All else equal, a student with one excellent teacher for one year between fourth and eighth grade would gain \$4,600 in lifetime income, compared to a student of similar demographics who has an average teacher.

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Metrics Used To Determine Teacher Effectiveness

Student Assessment

Many factors, including a student's previous learning, the school environment, and a student's home life, impact student learning in addition to the teacher they have at a given time. Hence, measuring a teacher's

impact on student learning can be difficult. Moreover, some methods for assessing student learning, such as standardized tests, take place just once or twice a year, which is not timely enough to inform instruction. In light of these challenges, using other student metrics can be beneficial. Two of the more common metrics are value-added measures and student learning objectives (SLOs).

VALUE-ADDED MEASURES (VAM) COMPARED TO STUDENT LEARNING OBJECTIVES (SLO)

	VAM	SLO
Definitions	Statistical measure used to compare the growth in a student's standardized test scores to an expected student growth trajectory.	Carefully planned goals for what a student will learn in a specific content area or subject over a given period of time as determined by teachers and local administrators.
Advantages	- Provide an objective measure of student growth. - Control for other factors that may impact student growth, such as prior test scores and family income. - Incorporate results from aligned standardized assessments. - Relatively easy to administer at scale compared to other methods.	- Establish a clear target for students and teachers. - Allow for locally-determined objectives that can be individualized to the needs of each student. - Effective metric for all grades and subjects. - Inform classroom instruction and assessment.
Challenges	- Require multiple years of data for both teachers and students to allow for accurate measurement. This may be especially problematic in states where assessments have changed frequently. - May not be able to accurately capture the growth of the highest-performing students due to ceilings in current assessments. - Fail to provide a measure of student growth for teachers of untested grades and subjects.	- May rely on subjective assessments of student learning. - Require significant investments in time and training for teachers and school administrators.

[Source 1](#) [Source 2](#) [Source 3](#)

Classroom Observations

[Research](#) shows that unbiased observations capture differences in teaching that lead to differences in student performance on assessments, but doing so requires multiple observations conducted by multiple observers. However, while [nearly every](#) state requires districts to use teacher observations in their evaluation plans, only 10 states require that all teachers are observed multiple times per evaluation

cycle. An additional 27 states require multiple observations for some teachers, typically those who are new to the classroom or on probationary status.

To ensure that observation measures are valid and reliable, principals and other evaluators also need training and support so they are fully prepared to conduct meaningful observations. It is also important to establish rubrics to focus each evaluator's attention on the most critical aspects of instruction.

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Student Perceptions

Evidence from the [Measures of Effective Teaching \(MET\) Project](#) shows that students are able to identify effective teaching when surveyed about their classroom experience. For example, students were asked the extent to which they agreed with statements like the following:

- My teacher in this class makes me feel that he/she really cares about me.
- Our class stays busy and doesn't waste time.
- My teacher explains difficult things clearly.

- In this class, we learn a lot almost every day.
- If I don't understand something, my teacher explains it another way.

Teachers who received positive feedback on student surveys from at least one class demonstrated higher learning gains across all of their classes compared to teachers who received poor feedback from student surveys. In particular, positive student responses around a teacher's ability to control a classroom and to challenge students with rigorous work were strongly correlated with higher student achievement.

KEY CHARACTERISTICS OF TEACHER EVALUATION SYSTEMS IN MASSACHUSETTS

ELEMENT	DESCRIPTION
Frequency	Massachusetts does not ensure that all teachers are evaluated annually. Veteran teachers who receive a rating of exemplary or proficient coupled with a moderate or high impact on student learning must only be evaluated once every two years. All other teachers, including probationary teachers, must be evaluated annually.
Observations	Massachusetts requires observations, but a required number is not specified.
Student Assessment Data	Massachusetts requires that evidence of student learning be considered in its teacher evaluations. Student learning is embedded as an indicator within one of the Massachusetts teacher evaluation system framework's four standards: Teaching All Students.

Source



MASSACHUSETTS

■ HOW EVALUATION RESULTS ARE USED IN PERSONNEL DECISIONS IN MASSACHUSETTS

CATEGORY	ARE EVALUATION RESULTS USED FOR THE FOLLOWING PERSONNEL DECISION?	DESCRIPTION
Compensation	No	No strict policy, but the state does vaguely tie performance to pay in its evaluation regulations for teachers whose performance rating is exemplary.
Professional Development	Yes	Massachusetts requires that "Educator Plans" developed by evaluators "shall use evidence of educator performance and impact on student learning, growth, and achievement in goal setting with the educator."
Tenure	Yes	Massachusetts requires teachers to earn ratings of proficient or exemplary on each Performance Standard and on the overall evaluation. A principal considering an employment decision leading to professional teacher status for any educator who does not meet these criteria must confer with the superintendent. The principal's decision is subject to review and approval by the superintendent.
Dismissal	Yes	Teachers can be dismissed for failing to meet performance standards as measured by the state's evaluation system.
Layoff	Yes	Tenure is the primary factor in determining layoff decisions. For teachers with the same tenure status, then evaluation ratings are considered as the determining factor.

Source



Teacher Evaluation Considerations For Policymakers

While many states have taken steps to strengthen their evaluation systems, there have also been considerable implementation challenges and political push back along the way. Hence, state leaders looking to improve educator evaluation systems may consider the following considerations.

Consideration #1: Does my state's teacher evaluation system reflect adequate stakeholder engagement?

Many states have received pushback from teachers and the organizations representing them around the use of student achievement data in evaluations. As with any major policy change or new program, cultivating stakeholder engagement and support is essential from the very beginning. Some states, such as Colorado, New Mexico, and Iowa, [created](#) state-appointed commissions — comprised of policymakers, community members, teachers, and association leaders — to consider how to measure and evaluate effective teaching. The commissions also sought input from a broad audience before delivering recommendations to the governor or legislature.

Consideration #2: How does my state weigh its teacher evaluation measures?

Even when states use multiple measures to evaluate teachers, they still need to determine how best to combine those measures to calculate individual teachers' effectiveness ratings. The MET Project looked at several different ways to weigh the measures, and found that giving test score data a weight between [33 and 50 percent](#) and combining that with student survey results and observation scores produced an evaluation formula highly predictive of student performance on tests of higher-order thinking, with little variation from year to year.

Consideration #3: How will my state use teacher evaluation ratings?

Once states and districts have the data they need to identify teaching quality, they can use it to reward and retain their best teachers, mobilize effective teachers to support those who need it, promptly remove ineffective teachers, and even provide feedback to teacher training programs. On the other hand, if an evaluation system appears to be solely punitive, there will inevitably be pushback.

As states examine their systems, it is important that they engage in open and continuous communication with educators. From the beginning, the purpose of the evaluation system should be made clear to both teachers and policymakers, and evaluation measures should be carefully selected to achieve those means. For example, a particular measure might be especially useful for determining professional development needs but not reliable enough to inform compensation.

Consideration #4: Who designs the state evaluation system?

Another consideration is whether the system should be designed at the state level or left to districts. States have taken a [number of approaches](#), from mandating a statewide system to leaving the design entirely to districts (with certain guidelines), to creating a system that districts can choose to opt into (or create their own). Nine states require that districts utilize a statewide evaluation system. The remaining states allow for districts to develop their own frameworks under the guidance of state-established criteria. In 21 states, districts must receive state approval of their evaluation system. It's critical that policymakers consider the feasibility and validity of reviewing local plans for comparability, especially if the state intends to use the results for other policy changes, such as compensation or evaluating teacher preparation programs.

