



Condition of Education

IN THE COMMONWEALTH

Resetting the Pace
of Education Reform:
Lessons of Continuous Improvement

Overview

Are Massachusetts schools improving quickly enough? How do we know if state and local investments in education are resulting in meaningful change? For those working on the frontlines, it can feel like our public education system is in a constant state of flux. Every year, there are new, urgent calls for reform, revisions to state and federal policies, and fresh research exploring the underlying causes of persistent challenges. As we search for the best way forward to ensure the success of all students, the constant state of shifting expectations has made it difficult for schools and communities to keep up.¹

Broadly speaking, our combined efforts over the past three decades have had a positive effect and resulted in upward trends for many students in Massachusetts. But today, the stakes for school improvement are higher than ever. Across the nation, educators and administrators are under pressure to demonstrate excellence and efficiency in preparing all students for an increasingly complex world,² and they must do so in the face of four major challenges:

- **Chronic underpreparation:** American high school graduates are consistently underprepared for the rigor of postsecondary coursework, while employers struggle to find entry-level employees with the skills needed for the modern workforce.³
- **Chronic opportunity gaps:** Many students, particularly black, Latino, and economically disadvantaged students, have limited access to the types of learning opportunities—such as college preparatory curricula and summer enrichment—that research links to strong learning outcomes.⁴
- **Revitalizing the workforce:** Teachers and school leaders leaping from one reform to the next face challenges in shifting resources and staffing.⁵ Teacher job satisfaction has declined precipitously,⁶ and principals find it increasingly challenging to hire and retain effective educators, especially in urban and low-income schools.⁷
- **Fragmented reforms:** Instead of investing in comprehensive improvement plans, schools and districts often feel pressured to adopt quick fixes, resulting in a series of disconnected, surface-level solutions that fail to address underlying challenges—what change experts call “solutionitis.”⁸

Massachusetts is not exempt from these challenges. Despite a top ranking nationally, schools exhibit persistent gaps in opportunities and outcomes, especially for the highest-need populations.⁹ Existing decision-making structures often leave educators little time to engage in deep, systemic change efforts designed to rethink and enhance existing approaches to learning. To promote improvement in the Massachusetts public education system, education leaders and practitioners need to move beyond the churn of new ideas and quick fixes and focus on building the capacity of educators to design, implement, and rigorously test learning strategies that most benefit the students they serve.

THE PROJECT

The Condition of Education in the Commonwealth project is one way the Rennie Center fulfills its mission of producing non-partisan, high-quality, independent research that promotes improvement in public education for all Massachusetts children.

Project Principles

- Education encompasses more than academics.
- Schools should not—and cannot—work in isolation.

Project Components

Data Dashboard: This interactive tool provides an in-depth look at 25 school performance indicators. Users can delve deeper by looking at different student groups and progress over time. This data is collected from the Massachusetts Department of Early Education and Care, the Massachusetts Department of Elementary and Secondary Education, the Massachusetts Department of Higher Education, the United States Census Bureau, and the United States Department of Education.

Action Guide: The Action Guide builds on the Data Dashboard with research-informed recommendations for statewide actions—policies, investments, and expansion of best practices—that have potential to address performance gaps and contribute to broad improvement in student outcomes. The report looks at progress made and remaining challenges and suggests strategies on how to apply those lessons to foster the success of all the Commonwealth’s learners.

2018: A Time for Reflection

Each year, the Rennie Center for Education Research & Policy presents the Condition of Education in the Commonwealth to provide state and local leaders with a comprehensive look at the progress of our educational system. We examine 25 state-level indicators of student progress across the education pipeline, while scanning recent movement in state policy to see what may be influencing outcomes and which challenges deserve more focus. This year, our fifth Condition of Education report, we're taking a step back. Given the persistent challenges facing our schools and a sense of reform overload, we think now is a good moment to reflect more broadly on the pace and progress of school improvement in our state.

There is a lot to learn at the local level—it is in communities, schools, and districts across the Commonwealth where educators are tasked with the responsibility of implementing change to drive improvement. When these efforts result in more positive outcomes for students they provide critical guideposts for bringing new learning strategies to scale. Such lessons can inform local and state investments of time and resources. However, more often than not, innovative and successful ideas fail to spread. The Rennie Center has long assumed responsibility for bridging divides within and between the constituencies of policymakers and practitioners. In doing so, we ask ourselves, our allies, and our critics how we can move from individual examples of education success to a public system that effectively serves all students.

As in past reports, we will examine multiple points across the education pipeline, from early education through college and career preparation. Irrespective of the specific point in the pipeline, the 2018 Condition of Education report will highlight how practitioners are learning to achieve and sustain meaningful improvement through locally constructed change processes, and examine the conditions that have supported these improvements at the local level.



CONTINUOUS LEARNING: Applying An Evidence-Based Approach to Improvement

Not all changes lead to positive outcomes, but all improvements require some degree of change.¹⁰ In today's knowledge-based economy, where there is an increasingly strong push for results, there is less discussion about what it takes to actually achieve set goals. In the education sector specifically, there is a lack of productive dialogue on which changes, and perhaps more importantly, which change processes are more likely to result in positive student outcomes that can be sustained and deepened over time.¹¹

A substantial body of research suggests that achieving lasting improvement in public education requires coherent, sustained effort.¹² Real progress requires careful planning, decision-makers who articulate clear goals aligned with evidence-based practices, and rigorous evaluation over time. Too often, though, impatience dominates decision-making.¹³ Limited time, poorly understood challenges, and misaligned incentives prompt leaders to leap to the next promising reform without stopping to assess how well current practices are working or whether these new reforms support their vision for student success. Consequently, communities may squander both personnel and financial resources on initiatives that require big investments while yielding limited results.

Over the past few years, the Rennie Center has worked closely with a group of Massachusetts schools, districts, and intermediaries to implement a more thoughtful, evidence-based approach to change. Participating educators engage in cycles of action and analysis with an aim of creating measurable and sustainable improvement. Our Massachusetts Teaching and Learning Network promotes an approach to improvement that is informed by leading researchers¹⁴ like Anthony Bryk, who describe effective change as looking quite different from any one-size-fits-all process.¹⁵ Bryk and colleagues describe genuine improvement as drawing on a “stew of learnings,” with a variety of options that can be applied to different settings in various ways. Change seekers select those practices best matched to the particular problem they seek to solve. They then apply a systematic, iterative approach to testing strategies, assessing their impact, and learning from results.

This cyclical approach to improvement may sound familiar to those in other industries where managers and practitioners engage in ongoing, disciplined inquiry to assess progress in achieving defined outcomes.¹⁶ In such “continuous improvement” models, learning has no endpoint; rather, participants identify promising practices, test their use, analyze the results, and then use the knowledge they’ve gained to course-correct or move on to the next decision.

In this improvement process, school and districts learn by doing. It’s an incredibly powerful change for education. The primary influencers of outcomes—school and classroom practitioners—are empowered to make informed decisions about their own practice and systematically test promising interventions in their own environments. Leaders’ primary task, then, involves setting up conditions to support continuous learning about practices, including mechanisms for practitioners to learn from one another.

A Local Lens on Improvement

Partnering with Commonwealth schools and districts that currently engage in a continuous learning process has had a profound impact on how we think about effective, sustainable change at the Rennie Center. We’ve learned tremendously from the participants in our own network and from other Massachusetts schools and districts that are employing similar cyclical, data-informed approaches to change.¹⁷ We believe there are important lessons from this work that can support local change efforts across the Commonwealth. That knowledge has also guided the creation of Rennie’s Change Management Framework,¹⁸ a rigorous, structured approach to planning and implementing district and school improvement strategies. The Rennie Center’s Change Management Framework outlines a set of steps that teams of educators can use to manage their own improvement processes. The Framework is organized around two key ideas:

1. **Defining the purpose and approach (the “what”):** Teams must first have clarity about the reason for embarking on any reform strategy by articulating the problem that they are trying to address. They must also have a clear idea of what they are hoping to achieve by defining success metrics. Once these critical pieces are confirmed, the team must select practices or interventions that will address the problem and help them reach their intended outcomes.
2. **Determining the methods for achieving goals (the “how”):** After clarifying the purpose, goal, and potential approaches for improvement, the team must delineate how they plan to lead, support, test, continually learn from, and refine implementation.

By bringing together the **what** and the **how**, the Change Management Framework is intended to help teams design and maintain effective improvement strategies resulting in sustainable education reform.

THE WHAT



PRINCIPLE 1: **Defining a Problem of Practice**¹⁹

To initiate an improvement cycle, a team of practitioners articulate and coalesce around a shared challenge or “problem of practice.” Teams use a variety of data to investigate the underlying causes and to establish a shared understanding of the need for change.



PRINCIPLE 2: **Planning for Outcomes**²⁰

The improvement team determines what the desired impact will be, defining quantifiable outcomes that are aligned with the problem of practice and developing interim measures to track progress.



PRINCIPLE 3: **Identify a Potential Intervention**²¹

Effective improvement teams identify research-informed practices and local best practices with potential to move them closer to their desired outcomes; together, they design a series of strategies or interventions that build toward a larger solution.

THE HOW



PRINCIPLE 4: **Trusting and Committed Team** ²²

To be successful, every improvement effort needs a trusting and committed team. This team of educators, often composed of individuals drawn from different organizations or departments within an organization, will guide improvement efforts. Ensuring and sustaining a team's commitment and trust requires constant attention to norms of behavior, roles and responsibilities, group composition, and buy-in; these factors must be considered for the planning team as well as those responsible for implementing changes.



PRINCIPLE 5: **Effective Operations** ²³

Improvement teams need the necessary conditions to execute their efforts effectively. Thus, operations require adequate financial and human resources to bolster a strong, shared infrastructure.



PRINCIPLE 6: **Continuous Learning** ²⁴

Teams must establish a systematic method to integrate, sustain, and scale-up interventions. This process will allow team members to share expertise and analyze data across iterative learning cycles.

While the Change Management Framework outlines a method for districts and schools interested in planning and implementing change, it can also be used as a lens for understanding and documenting other local change processes. Therefore, we have utilized this approach as a research-based framework for this year's Condition of Education Action Guide. In this year's guide, the Rennie Center highlights aspects of local change processes that reflect specific components of the Change Management Framework and provide insights into how local practitioners are learning to improve.

In the following sections, we highlight:

- A community-wide approach to developing a problem of practice related to addressing gaps in school readiness;
- A school-wide approach to adopting a common intervention that improves the culture of teaching and learning for staff and students in a fully inclusive school;
- A statewide, multi-community approach to planning for outcomes that strengthens the secondary-to-postsecondary transition for traditionally underserved students.

These three examples, across the pipeline and at different policy levels (i.e., school, community, and state), provide a window into improvement efforts happening across the Commonwealth, albeit at different stages of implementation and maturation. Change is afoot in Massachusetts communities, as local practitioners customize—and act on—their own change processes. By examining the steps leaders and practitioners in each of these communities have taken, we will pinpoint the conditions required to integrate effective improvement strategies into local change processes.

CONTINUOUS LEARNING In Springfield

Identifying a Community-wide School Readiness Problem of Practice

It's hard to overstate the importance of early education. The years from birth to age five are a period of enormous cognitive, social, and emotional growth, a time when children develop the foundational skills that will support their paths in school, college, the workplace, and life.²⁵ The benefits of early childhood education are particularly important for high-need children, including those from low-income families.²⁶ Quality early childhood programs—including pre-kindergarten (preK) and full day kindergarten—lay the foundation for the pre-reading skills of children who have less literacy exposure at home²⁷ and address systemic gaps in opportunity across student populations.²⁸

With this understanding in mind, Massachusetts has made significant efforts to improve access to, and the quality of, early education and care over the past two decades—most notably preK and kindergarten. The challenges remain significant, though, particularly in the state's lowest-income communities. Ensuring access to quality programming is a necessary but ultimately insufficient step, if the systems that provide these important educational experiences are not aligned and working together.

Springfield is one example of a community that continues to grapple with gaps in school readiness. Currently, only half of children in Springfield participate in a formal school experience before the start of kindergarten. An additional challenge in Springfield is alignment: with a mix of early childhood providers and a range of educator expertise and curricula, even those children who do attend a preK program enter kindergarten at very different skill levels.

Examining Local Change: A Community-wide Alignment Effort

Springfield has worked to cultivate a culture of high expectations and continuous improvement across city schools. The Early Childhood Education Center has led a community-wide effort to strengthen collaboration across a mix of preK providers. This team of district, school-based, and community partner educators has taken the lead on bringing a reform mindset to the city's early education programs. Leveraging federal and state funding, educator expertise, and a rigorous data-informed decision-making process, the focus of community-wide efforts has been to prepare all students for kindergarten and beyond.

In 2015, the Springfield community was awarded a four-year, federal Preschool Expansion Grant (PEG) of \$14.4 million with \$3.6 million disbursed to the community each year of the grant. This funding has been utilized to create 195 new preschool seats for children from low-income households who had never attended preK previously. Using PEG funds, districts leaders facilitated a partnership among three of the city's preschool providers, including Holyoke-Chicopee-Springfield Head Start, the YMCA of Greater Springfield, and Square One, a nonprofit provider. Now in their third year of collaboration, these partners have learned important lessons, becoming a laboratory for early childhood innovation.

COMMONWEALTH'S PROGRESS Early Education

GOAL: Improve early education access and quality

Massachusetts continues to expand access to high-quality early education—demonstrating progress in the following indicators:

- Approximately **two-thirds of children aged 0-5 eligible for a subsidy are enrolled in high-quality early education programs**, continuing an upward trend.
- An overwhelming majority of students who attend kindergarten do so for the full day due to **significant increases in the availability of full-day kindergarten programming across districts**; this indicator has increased by 8% over the last four years.

All indicator data cited in this box can be found on the Rennie Center's Data Dashboard, where full citation information can be found: renniecenter.org/data.

THE WHAT



KEY PRACTICE: Partners Identify a Common Problem of Practice

The Springfield Early Education Childhood Center's example illustrates how a team of educators identify, and act on, a problem of practice. Early educators in Springfield identified a specific challenge inherent in the current system: aligning academic expectations across providers in order to strengthen the transition from preK to kindergarten.

Before receiving the federal Preschool Expansion Grant, district-run and community-based early education programs prioritized school readiness, including early literacy indicators. Springfield early education leaders and staff knew that these efforts, however rigorous, were not yet closing gaps in learning. Traditionally, only 12% of Springfield students entering kindergarten were meeting school readiness benchmarks, a data point that didn't seem to be influenced by a student's preK experience.

Springfield educators analyzed data on the scale of the community-wide gap in readiness. Practitioners identified different trends in student acquisition of pre-reading skills that varied across preK programs, suggesting that the diverse approaches used by providers—and the use of multiple curricula—may be widening gaps. After reviewing school readiness data, the district and several community-based preK providers began to investigate the curricula used by community partner agencies, comparing the pre-reading skills that were emphasized. This process uncovered the notion that there was not consensus on curricula, the literacy skills being taught, or how skills were assessed.

The team of educators determined they needed an aligned approach that was steeped in evidence-based practices to improve the low numbers of literacy-ready children entering kindergarten—making a decision to set goals for the early literacy skills of preK children. To meet these goals, the school district and the community partners selected a comprehensive curriculum that has strong early literacy, oral language, and social-emotional development as foci. The team of Springfield educators solicited guidance on early implementation of the curriculum from faculty members at the Harvard Graduate School of Education. Building consensus around the need for early literacy goals—and selecting a preK curriculum—became critical to the development of the Preschool Expansion Grant (PEG) in Springfield.

Thanks to resources from federal PEG funds and additional local philanthropic support, almost 100 classrooms across the city (including all Springfield Public Schools' preschool classes) implemented the curriculum, with educators participating in extensive professional development. For example, educators participated in a coaching program that includes classroom modeling, observations with feedback, and professional learning communities. The coaches also host a Facebook page to provide additional resources, and they have developed early literacy modules to support educators in community-based preK programs who are not using the aligned curriculum.

THE HOW

SUPPORTING PRACTICES: Building a Community-Level Partnership

Providing opportunities for early education providers in Springfield to voice concern and prioritize options enabled these educators to narrow in on specific, actionable levers to improve student learning outcomes. With consensus among partners, Springfield worked to develop systems and protocols as part of a community-wide effort to align local practices and close school readiness gaps. This team of educators worked to develop new strategies aligned with the problem of practice.

- **Facilitating a team:** Springfield leaders began by building a team of educators to actualize their plan; the Early Childhood Education Center assembled a core group of early educators (public and private, preK and kindergarten teachers) committed to making progress. This team of educators collaborated around a shared priority to address local challenges in school readiness across early education providers, and they received a public commitment for the work from the Superintendent.
- **Consensus and alignment on expectations:** Working collaboratively, these practitioners focused on aligning preK curricula with kindergarten expectations to smooth students' transition into the public schools and enhance their chances for success. Early educators in Springfield then worked on linking systems, creating a professional development model to be shared across preK educators in the public schools and community-based programs. As Springfield continues to implement and reflect on strategies, they have experienced early success with increased participation of teachers using a common

curriculum. The aligned efforts of Springfield have eased the preK-to-kindergarten transition for students, families, and teachers alike.

- **Looking to the data to reflect, monitor, and act:** The Early Childhood Education Center engages in an iterative process in which individual teachers use regularly collected data to chart student progress. Processes and protocols to continuously check in on student progress have already been developed. During weekly data meetings, coaches hired by the Early Childhood Education Center facilitate conversations on practice, using various kinds of data to identify trends in both student progress and students' learning needs. These meetings afford teachers the collaborative space to discuss classroom practice related to ongoing learning needs.

THE RECOMMENDATIONS



Defining an Actionable Problem of Practice: Community-Level

Developing a clear definition of an actionable problem of practice to strengthen the transition between preK and kindergarten enabled early educators in Springfield to identify specific contributing causes to the community-wide gap in readiness and explore factors that could drive improvement. This discovery process allowed Springfield to map out an improvement plan to begin aligning expectations for early literacy skills across preK providers.

When confronted with a 12% readiness rate throughout the district, Springfield could have set out to plan and implement any number of reform strategies. However, making change is not the same thing as improving practice. When teams jump into change without taking the time to identify and fully think through the problem they're attempting to solve, they're unlikely to produce the outcomes they hope to achieve. More often, their haste will lead to misaligned incentives, misallocated resources, and increased frustration. Community leaders might consider the following steps to identify and articulate a common problem of practice:

Has your team developed a clear understanding for the need for change?

- **Identify potential drivers of improvement.** Specify local challenges, reliable data sources, and key factors that can drive improvement; these are often easily identifiable in regard to existing gaps in your local community. Springfield consulted student outcome data and community-wide instructional practice to identify potential levers for improvement.

Has your team defined and agreed on the underlying causes?

- **Build consensus.** Collaborate with community-wide providers to streamline expectations for learning. Springfield assesses student learning and regularly evaluates the expectations of early education providers in light of academic expectations in the elementary grades to ensure that the youngest learners are well-positioned for success in school.

Do all team members feel a sense of ownership for the articulated challenge?

- **Ensure articulated problems of practice are actionable.** Develop structures and protocols for teams to use when analyzing data to make informed decisions. Communities can enhance the application of data to school readiness issues by crafting data sharing agreements, whereby community stakeholders can have seamless access to multiple types of data across sites.

For more information on the change management process please see www.renniecenter.org/change-management

THE NEXT STEPS

As noted above, the federal Preschool Expansion Grant (PEG)—together with the additional private funds the city brought in—provided a foundation of financial resources to anchor the community-level improvements in early education that Springfield set as goals. Shared funds across the early education community signaled that all providers would be afforded “a voice at the table,” collaborating on community-wide goals.

Looking ahead, some practices to improve community-wide school readiness are already self-sustaining. However, a large chunk of Springfield's agenda for continued improvement requires additional funding: the shared professional development and coaching model; use of the community data warehouse to share data across sites; and a referral system for families to ease enrollment across programs are all resource-dependent. With Springfield currently in year three of the PEG grant's four years of

funding, there are looming questions about resources in light of the term-limited federal funds. Will all partners be able to continue programming with the sunset of federal funding? Are these programs sustainable with local and state resources alone?

Even with future funding left to be determined, the Early Childhood Education Center in Springfield illustrates how local practitioners can collaborate to articulate a shared problem of practice, determine a course of action, and test and reflect on progress. Springfield has leveraged this common problem of practice to develop systems and teams that support an ongoing improvement process. The following section considers how the state can support—and communities can lead—the identification of specific and actionable problems of practice.

State-Level Policy Supports

The work of Springfield provides insight into how, by supporting local communities in doing the hard work of aligning high-quality early education offerings, the state can bolster its recent progress and advance the availability of high-quality early education for more families in the Commonwealth. The state can support local improvements in the early education landscape with the following strategies:

- **Focus on linking systems:** Provide assistance and resources to communities attempting to link learning standards in community-based/private preK programs to kindergarten learning standards. Many communities across the state are doing this important work on their own as a way to improve school readiness. ESE and EEC can play a role by providing practical tools and resources and connecting communities engaged in this work.
- **Enhance incentives for shared professional development:** Continue to provide financial incentives to school districts that plan and offer professional development on school readiness issues. The state has encouraged Birth to 3rd grade partnerships that supported community-level coherence in professional development. These grants have since sunsetted, and additional funding can support community-wide programming e.g., professional development offered to community-based or private providers, and public preK teachers.
- **Foster agency collaboration to support child outcomes:** To better serve the needs of children, the CARE Act, new legislation from the Baker Administration, introduces and incentivizes new school-based models for coordinated support for students in need. If this type of coordination can be achieved at scale, it has the potential to strengthen the school-community landscape for all young people.

STATE POLICIES

Early Education Expansion & Quality

EXPANDING ACCESS

1997: Massachusetts Department of Elementary and Secondary Education introduces a requirement that all districts provide 425 hours of kindergarten per year (approximately 2.5 hours per day) to all children.²⁹

2015: In 2015, Massachusetts was awarded its second year of funding of the federal Preschool Expansion Grant program. The program funds a year of free, high-quality preschool for low-income four-year-old children through partnerships between public school districts and licensed community-based programs.³⁰ The additional \$14 million will further expand access to high-quality preschools in five communities across the state serving 850 students.³¹

IMPROVING QUALITY

2000: Kindergarten Development Grants promote increased rigor in kindergarten by supporting improvements such as increased staff, special needs inclusion, expanded professional development, accreditation support, and curriculum development, as well as the startup costs, professional development, and curriculum development needed to move toward full-day kindergarten. Support peaked in FY08 at \$33.8M and settled at around \$24M in recent years.³² This grant was eliminated in 2017.

2007: In FY2007, Massachusetts began including funding in the state budget to enable the Department of Early Education and Care (EEC) to launch the Universal PreK Grant Program.³³ The grant program provided funding to sustain and improve the quality of preschool programs, serving children aged 2 years, 9 months through kindergarten entry throughout the Commonwealth's mixed delivery system.^A

2007: The Massachusetts Department of Early Education and Care (EEC) began developing the Quality Rating and Improvement System (QRIS) in 2007 and launched a QRIS Pilot in 2010. The quality standards play an integral role in implementing the QRIS, supporting the integration and use of child development principles and practices. The QRIS Standards integrate educator preparation, learning standards, curriculum, assessment, and family engagement in order to ensure positive outcomes for children. QRIS is currently being revised again, based in part on findings from a validation study conducted in 2016.³⁴

^A The mixed service delivery system includes public, private, non-profit and for-profit preschools, child care centers, nursery schools, preschools operating within public and private schools and school districts, Head Start programs, and independent and system-affiliated family child care homes.

CONTINUOUS LEARNING At The Henderson

Examining school-wide adoption of an evidence-based intervention to achieve a fully inclusive learning environment

Today's educators are faced with an ever-changing terrain of reform strategies designed to serve the increasing diversity of student learning needs in public school classrooms. To meet the needs of a diverse student body—which includes students with different competencies, life skills, and experiences³⁵—educators must ensure that all students have full access to learning. In Massachusetts, an increasing number of students are being served in full inclusion classrooms (i.e., classrooms designed to educate students of all abilities). However, placements and inclusion rates vary widely by district.^B

Currently, the Massachusetts Tiered System of Supports (MTSS) provides a blueprint for school improvement across districts, schools, and classrooms.³⁶ High-quality core instruction, universal screening, and ongoing progress monitoring lies at the foundation of the framework. Tiered interventions are provided—within classrooms—for students who require a higher degree of support.³⁷ Many schools and districts, however, are not implementing MTSS with fidelity and have not fully harnessed the potential of the MTSS framework. Even for schools that have implemented MTSS more comprehensively, many seek to further individualize instructional practice and support all students' learning needs.

Universal Design for Learning (UDL) offers a promising approach to strengthening core instruction for students with diverse learning needs. UDL is a framework for learning guided by an understanding that a one-size-fits-all curriculum does not serve any student well. Through flexible and customizable teaching methods, assessments, and curriculum materials, UDL is designed to give every student the opportunity to access rigorous content.³⁸ UDL is most effective when all members of the school community, including regular education teachers, special educators, and language acquisition teachers, are collectively responsible for student learning outcomes. School leaders who embrace a mission that distributes the responsibility of educating all learners among all educators are most likely to harness the potential of UDL.³⁹ The instructional practices that are at the heart of the UDL also offer educators guidance on how to reflect shared ownership for student learning in teaching practice.⁴⁰ One school that is making strides in implementing a fully inclusive classroom model is the Dr. William Henderson K-12 School.

COMMONWEALTH'S PROGRESS Supporting Diverse Learner Needs

GOAL: Individualizing instruction to support diverse student populations and equipping teachers with appropriate supports

Massachusetts' districts and schools continue to expand their use of inclusive practices—demonstrating progress in the following indicators:

- The number of students with **Individual Education Plans (IEPs) spending 80% or more of their day in inclusive settings has increased 5%** in five years.
- Fewer teacher license waivers are being issued for special education positions, indicating an **increase in the number of licensed special educators** in the Commonwealth's classrooms—there has been a 10% decrease in these waivers issued for special education positions, from 70% in 2013 to 59.5% in 2016.

Despite the positive movement in these indicators, Massachusetts still has work to do in providing an inclusive learning environment in all schools.

All indicator data cited in this box can be found on the Rennie Center's Data Dashboard, where full citation information can be found: renniecenter.org/data.

Supporting Effective Teaching of Diverse Learners at the Henderson School

The Dr. William Henderson K-12 Inclusion School in Dorchester is Boston's only fully inclusive K-12 school. Henderson teachers and staff are committed to maintaining an inclusive culture by minimizing barriers and maximizing opportunities for learning and participation for all students.⁴¹ Building on several years of work to strengthen inclusion, the Henderson School has adopted a school-wide intervention that prepares and trains all educators in effective inclusion practices; teachers are given practical

^B In 2010-2011, Massachusetts identified students as eligible for special education and related services at rates substantially higher than other states (Hehir, 2009). Please refer to the Reference Notes section for full citation information.

opportunities to learn the skills/knowledge and facilitation methods to differentiate instruction for all students.⁴² This training is designed to ensure that all students can access learning itself, instead of just an inclusive learning environment.⁴³

The Dr. William Henderson School provides a helpful example of how a team of educators identify an evidence-based strategy that draws from both research-informed practices and home-grown expertise, building programmatic elements that adapt to the local context.

THE WHAT



KEY PRACTICE: Identifying an Evidence-based Intervention—A Common Approach to Teaching and Learning

Staff at the Henderson have always sought to design learning that was truly inclusive for all students, where everyone felt valued, respected, and held to high expectations and rigorous standards. In response to discussions about a possible school expansion, school leaders and staff began to discuss better ways to meet student learning needs, which were becoming ever more diverse. The team identified UDL as a school-wide strategy.

While some educators at the Henderson have been focused on implementing UDL practices for a number of years, school leaders and teachers made the decision to fully embrace this pedagogical model and scale it school-wide. In 2016, all educators at the Henderson began to implement UDL as a means to transform school culture and instructional practices to more fully support the inclusive teaching and learning environment that existed at the school. With UDL as a school-wide framework, the Henderson School embarked on a continuous improvement process. School staff set their sights on transforming both school culture and instructional practices.

Currently, Henderson staff design and guide the teaching and learning experience through specific instructional goals, assessments, methods, and materials to meet the individual needs of practitioners and students. As a team, school leaders and staff have articulated a common understanding of appropriate strategies to be applied to the local student population, including existing effective practices that can be leveraged. As the Henderson continues to implement and refine strategies, teachers and school leadership will continue to consider the “fit” of the programming to ensure implementation efforts are maximized.

THE HOW

SUPPORTING PRACTICES: Applying a Common Intervention & Data Cycles to Assess Improvement

With an identified common approach and philosophy to instruction, the Henderson staff worked to develop school-wide structures and strategies to continuously determine whether instructional activities were producing the best outcomes for students.

- **Culture of feedback:** With support from school leadership, educators at the Henderson focus on creating a true learning environment for educators wherein staff engage in a culture of feedback. Henderson practitioners have operationalized a system of feedback through detailed action plans to support teachers in identifying areas for their own growth. Educators, who participate in a co-teaching model where general education and special education teachers jointly plan and execute lessons, transparently share their practice and feedback to improve learning for all students regardless of ability. School leaders at the Henderson collaborate with teachers on uncovering the most effective methods for enhancing student learning, continuing to point toward improvement for all students and educators.

Universal Design for Learning in the Classroom: What does it look like?⁴⁴

Multiple means of representation: Students have opportunities to use each of their senses to gather information, including sight, the ability to interpret images; vision, the ability to visually process systems of detail; and touch.

Multiple means of action and expression: Students have a variety of options to participate and show what they know, including writing, speaking, drawing, movement, or technology.

Multiple means of engagement: Teachers gain students' attention through a variety of methods, including individual choice, connection to students' lives, and varying levels of sensory stimulation.

- **Data as a flashlight for progress and growth:** The Henderson uses data to highlight trends in progress and areas for student growth. Utilizing statewide assessments, as well as school- and district-developed interim assessments, educators and students set goals based on progress against content standards. Educators then check in on students' growth against those standards at data cycles throughout the year to determine progress. Teams of educators also use this data to evaluate the effectiveness of their practice, consistently asking, "How do you know if you have effectively facilitated content and material? How do you know that we are making progress against student learning goals?" As the Henderson transitions to the school-wide adoption of UDL, staff continue to leverage data to inform decision-making regarding student learning and curriculum delivery. The school has experienced early success as trend data from 2006-2014 illustrates a significant increase in the percent of students scoring advanced or proficient on the ELA, Math, and Science state assessments. Most notably, the percent of students scoring proficient or advanced in Math has increased from 32% in 2006 to 79% in 2013. Additionally, the teachers at Henderson are diligent at determining students' areas of strength and using data displays accessible to staff, students, and parents to illustrate these strengths.
- **Teaching and learning for all:** The team of educators at the Henderson works collaboratively to fulfill their mission of full inclusion and effective teaching, focusing on questions of continuous learning. A majority of teachers (85%) report that they work within supportive teaming structures to plan and act on pedagogical improvements and openly reflect on the success of the implementation in the classroom. Importantly, 85% of teachers report feeling comfortable among team peers, with whom they present problems of practice, share UDL practices they have tried, and develop ongoing professional development plans. Against the backdrop of the school-wide implementation of the UDL approach, the Henderson team fosters both a problem-solving and learning environment for educators and students alike.

THE RECOMMENDATIONS



Identify a Potential Intervention: School/District-Level

In response to an expanding and diversifying student body, staff at the Henderson sought to identify a clear and coordinated approach to teaching and learning that provided a shared language, set of tools, and expectations. Years of research, and home-grown expertise, pointed to the schoolwide adoption of UDL as a promising approach to meet the Henderson's needs. It provides a common school-wide framework for teaching and learning that allows staff to reflect on existing practices and leverage them to support students and educators alike.

Because Henderson staff had a clear sense of what they hoped to accomplish, they were able to avoid the "square peg, round hole" dilemma—that is, implementing a practice or intervention that may be effective in theory, but which doesn't align with the students' needs and the team's vision for success. Effective strategies for reform should be both rooted in proven best practices and grounded in the local context. If teams overlook either of these components, they may find themselves applying a reform strategy that doesn't address the problem of practice they set out to address. Learning from improvement at the Henderson, school and district leaders can consider the following steps:

Does your team share an understanding of the local context?

- **Build a common notion of local needs among educators.** Investing in a distributed leadership model empowered teacher leaders to collaborate and arrive at shared perceptions of the most pressing student learning needs. The Henderson utilized a collaborative approach to identifying strengths and areas for growth to improve teaching and learning for all.

Has your team identified programmatic components that align with best practice?

- **Pinpoint a common approach.** Recognizing the "best" course of action requires authentic conversation about areas for growth and the most appropriate strategies to get there. The mission-driven focus at the Henderson provided opportunities for staff to use data to identify student learning needs and existing effective practices within the school that could address them.

Has your team considered the “fit” between programmatic components and the local environment (e.g., identified needs, vision of success, operating structures)?

- **Foster educator learning.** Committing to change can create an uneasy and vulnerable environment for educators who may feel as though they're under a microscope. Investing in the professional learning of the staff eases anxiety about “change.” School leadership at the Henderson committed to the psychological safety of the staff, creating a space where experimentation and adaptability is encouraged.

For more information on the change management process please see www.renniecenter.org/change-management

THE NEXT STEPS

The school-wide implementation of UDL at the Henderson has lent itself to scalable success and continuous improvement as the school has expanded from a K-5 school to a K-12 school in the past three years. School leaders have continued to focus on consistent expectations even as expansion in the student population has meant bringing on new teaching staff. Practitioners at the Henderson have prioritized data analysis cycles to focus on effective instruction and sustain a culture of learning and problem solving among educators.

The Henderson’s implementation of UDL practices has enhanced feedback between peer-practitioners, students, and families. Coupled with the school’s systematic data-informed approach to effective instruction, many of the specific practices at the Henderson provide district and school leaders with insights into how to identify an evidence-based intervention and test and reflect on progress. The following provides an outline for how other schools and districts might approach identifying evidence-based improvement strategies, and how the state might support school-level strategies for action.

State-Level Policy Supports

The work of the Henderson provides insight on how the state can support schools in equipping educators to teach diverse student populations, including the following strategies:

- **Increase resources to support Universal Design for Learning:** Provide access to increased professional development and teaching and learning resources for all educators across the Commonwealth. These resources would support the implementation of strategies like UDL with greater fidelity. Stronger integration of UDL principles would in turn strengthen implementation of the MTSS framework, ensuring that all learners have multiple entry points and can access core instruction.
- **Expand pathways for educator licensure:** Educators today work with a student population with highly diverse learning needs. While the current educator licensure system separates special education licenses from core academic subject licenses, creating an option for dual licensure increases the likelihood that educators would enter the teaching profession more equipped with knowledge on how to differentiate classroom instruction and teach students of differing abilities.

STATE POLICIES Improving Quality

2011: The Nordberg v. MA Department of Elementary and Secondary Education (ESE) decision of 2011 sought to revise ESE’s current system of granting first-year waivers of the educator licensure requirements upon request and certification by school superintendents.⁴⁵ Shortly after this decision, updated regulations were adopted for educator licensure and preparation programs and educator license renewals.⁴⁶ The Commissioner may grant a district a 1-year exemption (waiver) from the requirement to employ a licensed educator, but only in the case of hardship.⁴⁷

EXPANDING ACCESS

2014: Massachusetts made some strides in expanding access to an inclusive education environment with the passage of new regulations articulating the composition of an IEP team (consisting of student, parent, school psychologist, teacher, guidance counselor, etc.). IEP teams determine the placement of students, whether it be an in-district or an out-of-district placement.⁴⁸ Furthermore, each district is required to educate students in the least restrictive environment (LRE), ensuring that students with disabilities participate alongside their nondisabled peers to the maximum extent appropriate.⁴⁹

ACCOUNTABILITY

2017: Accountability is increasing for all students, including students with disabilities. As of 2017, all students, including students with disabilities, will be required to participate in all MCAS tests that are scheduled for their grade. Students with significant disabilities who are unable to take the standard tests, even with accommodations, must take the MCAS Alternate Assessment (MCAS-Alt).⁵⁰ Furthermore, as a requirement for high school graduation, all students are required to meet the competency determination standard in English Language Arts (ELA), Mathematics, and Science and Technology/Engineering (STE), as well as all local graduation requirements.⁵¹

CONTINUOUS LEARNING

Across the Commonwealth at 100 Males to College Sites

Exploring Data-informed Outcomes to Support Secondary and Postsecondary Transitions

Most employers place a premium on postsecondary education or training, whether it be a college degree or a work-based credential. Employers view the postsecondary credential as the hallmark of higher-order critical thinking skills, as well as the transferrable and interpersonal skills needed to “learn on the job.”⁵² To meet workforce demands, postsecondary institutions, nationally, are raising expectations for college persistence and completion, in an effort to ensure that more students who enter college leave with a degree or credential.

The same is true here in the Commonwealth. In 2012, the Massachusetts Board of Higher Education launched an ambitious agenda for the state’s system of public higher education that would come to be called the Vision Project.⁵³ In response to the shifting landscape in workforce needs, and based on the notion that Massachusetts’ public higher education system should be a national leader, the Board of Higher Education and the Department of Higher Education set new goals around academic performance that supplemented the agency’s long-standing goals around access and affordability.⁵⁴ To monitor progress against these new academic goals, the Massachusetts Department of Higher Education (DHE) identified key outcomes in college participation, college completion, student learning, and workforce alignment, setting targets for performance across community colleges, state universities, and the University of Massachusetts (UMass) system.⁵⁵

In monitoring state-level indicators as part of the annual Vision Project report, DHE highlighted important bright spots for the system: Massachusetts remains a national leader, for instance, in the percentage of students who complete a high school diploma and enroll in college. Additionally, over the last five years college completion rates in the state university and UMass systems have improved, and the percentage of four-year degrees in key areas of workforce need (e.g., Bachelor’s of Nursing) also increased.⁵⁶

However, this data also identified challenges, specifically the urgent need to eliminate significant disparities in college enrollment and completion rates, especially for low-income males and males of color. For example, the most recent Commonwealth Vision Project data illustrates significant gaps between African-American and white students, including:

- an 8% difference in college enrollment rates,
- a 17% difference in recent high school graduates testing into remedial math courses,
- and an 11% gap in six-year graduation rates at state universities.⁵⁷

DHE leaders strategized to initiate new programs to support college enrollment, persistence, and completion among this target population. As a result, DHE has collaborated with communities across the Commonwealth to build local 100 Males to College programs, intended to strengthen the secondary-to-postsecondary transition. 100 Males to College programs are designed to address persistent opportunity and achievement gaps through a holistic approach to preparing students of color for rigorous college work, supporting their transition to postsecondary education with guidance about life on a college campus.⁵⁸

COMMONWEALTH’S PROGRESS College and Career Preparation

GOAL: **Cultivating learners prepared for success in college, careers, and life.**

Massachusetts continues to expand opportunities around college and career success, demonstrating progress in the following indicators:

- **9% increase in MassCore completion**, or the recommended course of study for career and college preparation (68.4% in 2012 to 77.4% in 2016)
- **8% decrease in students enrolled in developmental, or remedial, courses** (36% in 2012 to 28% in 2016)

All indicator data cited in this box can be found on the Rennie Center’s Data Dashboard, where full citation information can be found: renniecenter.org/data.

A Collaborative, Community-Wide Approach to Preparing Students of Color for College

Since its inception in 2015, the 100 Males to College initiative has aimed to help at-risk students, including low-income males and males of color set—and achieve—goals for postsecondary education completion and career success. Anchored in a positive youth development model that embraces culture, identity, and community, 100 Males to College builds partnerships in local high schools and the community to bolster student success. Sites currently exist across the state—including Brockton, Framingham, Springfield, Worcester, and most recently Salem—and local leaders are planning for student outcomes while building programming aligned with postsecondary completion and career success goals, albeit at different stages of implementation.

100 Males to College supports the successful completion of high school and increased postsecondary access, enrollment, and retention. Typically, local sites recruit students, cultivate partnerships with community groups, identify community resources, develop a curriculum, and deliver high-impact activities for family engagement to support student success.⁵⁹ Many of the 100 Males to College sites approach this college access and success work collaboratively, convening local high schools and institutions of higher education to address shared priorities such as:

- increasing college aspiration and knowledge of the college application and enrollment process;
- providing students with the tools and experiences they need to be college and career ready;
- committing a “village” of stakeholders to leverage resources to support these students.⁶⁰

THE WHAT



KEY PRACTICE: Planning for Outcomes for College Success

100 Males to College sites provide an example of the importance of planning for desired outcomes while implementing improvement strategies—a critical component of the change management framework. To start, the collaborative approach of 100 Males to College sites is strengthened by their attention to, and utilization of, state and local data. The 100 Males to College sites collaborate with DHE staff to couple existing state-level indicators (i.e., Vision Project metrics for college enrollment and completion) with local college and career readiness data. Such local data may include K-12 indicators as well as available community data on youth outcomes. Sites use this data for two purposes. First, local 100 Males to College leads develop programmatic activities focused on local college enrollment and completion needs aligned with data. Next, these data indicators act as a “flashlight” to track and monitor student success and, ultimately, program impact.

This use of state and local data to identify gaps in college- and career-preparedness sets the 100 Males to College initiative apart from other college access and success programming. The state-level data provides a common foundation for local sites to set quantifiable, measurable goals around college participation and retention. With desired outcomes in mind, site leaders develop evidence-based strategies that align with what the data highlight. In selecting strategies, sites also set outcome targets for the specific college and career readiness programming they will implement. For example, some sites focus on ensuring more at-risk students attain a high school diploma, while others emphasize a successful transition to postsecondary education. Almost all 100 Males to College sites work with program participants who persist in postsecondary education to ensure the successful completion of a credential, whether it be a college degree or a workforce certificate. Collaborating with colleagues from other sites, local leads can identify and share measurement techniques for monitoring and assessing program progress against the specific community-level goals that were set by analyzing multiple data sources.

As 100 Males to College programs continue to fine-tune their strategies, they are also focused on tracking their outcomes. In the 2016-2017 school year, the Springfield 100 Males to College program served 119 students, including 59 seniors, representing all five district high schools. Of these 59 seniors served, 100% completed a high school diploma from the Springfield Public Schools, and 95% enrolled in an institution of higher education. Moving forward, Springfield will compile student-level data to document the number of program participants completing a college degree or credential. Worcester, where programming began last year, is also experiencing early success. Ninety-seven students enrolled in the program; 97% of these program participants have passed dual enrollment courses and are preparing for college.

The data-informed approach that 100 Males to College has employed—combining state-level indicators with local data to identify needs, align programming strategies, and set outcome targets—supports reflection on key processes. Recruitment, program alignment with college- and career-readiness goals and student needs, and funding strategies are all site-level decisions that are made using data. Further, the entire 100 Males to College initiative has a shared understanding that state and local data will be used to identify desired outcomes, set targets, and monitor progress. Perhaps most importantly, this commitment to using data provides insights into how local communities and the state can collaborate, using a common data framework, to improve postsecondary outcomes for all students.

THE HOW

SUPPORTING PRACTICES: **Building an Effective Team of Educators to Monitor Outcomes**

Identifying and engaging the key players in each community ensured community-wide involvement across local 100 Males to College sites. This provided 100 Males to College sites with a crucial foundation as they developed strategies to address local college- and career-readiness goals and then continuously monitor progress.

- **Diverse & accountable team:** 100 Males to College uses a collective impact approach focusing on student agency and identity. To achieve community-wide implementation, local 100 Males to College programs seek to cultivate teams of educators to plan and implement postsecondary supports. While the 100 Males to College team may vary from community to community, the team always includes representation from the local high school (Principal, Director of Guidance and Counseling), higher education institutions (Director of Student Services, Intercultural Affairs, first-generation student mentors, etc.), and local business/community organizations. Facilitating teams across partner organizations has strengthened the program's ability to support students as they seamlessly transition from secondary education to postsecondary opportunities.
- **Equitable leadership among partners:** Coordinating and executing this work is no easy feat. To ensure equitable leadership and accountability for progress, sites develop partnership agreements to clearly articulate roles and responsibilities from the start. The clarity around roles and responsibilities provides a clear path forward so that partners feel empowered and accountable for their support. Each partner has established clear expectations to execute implementation efforts.
- **Convening affinity groups:** As the 100 Males to College sites develop strategic priorities, the initiative is building toward a state network, convening affinity groups of 100 Males to College sites across the state. DHE staff leading the initiative have prioritized convening local site leaders. The facilitation of this learning community across program sites provides a valuable opportunity for local programs to reflect on their progress and areas for growth. The state-wide convening of affinity groups provides the potential for best practices to spread and scale.

THE RECOMMENDATIONS



Planning for Outcomes: Community-Level

Visualizing what success should look like provides teams with a clear direction, enabling them to plot out intermediate steps and make real-time adjustments when benchmarks aren't reached. Teams that lack agreed-upon outcomes will not be able to define where they are headed, whether their interventions are working, or how they will know when they've achieved success. In short, they will not know whether the change they produce is actually leading to measurable improvements in student outcomes.

By reflecting on local and state-wide indicators, 100 Males to College sites purposefully identify and set targets for program and student outcomes. Site leaders map a course of action leading to their desired goals, and they collect data at multiple points in the process to determine whether they are on track to reach this end point. Utilizing a collective impact approach has brought about community-wide engagement in strategies to better meet the needs of their student populations.

Has your team articulated quantifiable, measurable goals?

- **Planning for outcomes.** Starting with the end in mind, educators should consider the desired impact of their efforts and how progress will be quantified or measured. Leveraging state-level indicators, 100 Males to College utilizes this information to identify, set targets for, and track local program outcomes.

Has your team identified measurement techniques to determine progress against goals?

- **Identify measures to monitor progress.** The ability to measure progress against goals empowers educators and school leaders in making data-informed decisions to best support student learning. The 100 Males to College sites utilize data as a flashlight to both inform the planning and development of their programs and assess the impact of their work.

Does your team have the capacity and appropriate tools to document progress and outcomes?

- **Foster local partnerships to align outcomes.** High schools cannot and should not work on their own to strengthen the secondary-to-postsecondary transition. Partnerships with local institutions of higher education and community-based organizations are crucial to providing supports for students as they prepare to transition to postsecondary options. The collective impact approach of 100 Males to College provides an example of how communities can convene partners to share best practices.

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THE NEXT STEPS

In February 2017, DHE awarded state Performance Incentive Fund (PIF) grants to 100 Males to College programs for two purposes. First, all higher education institutions in existing 100 Males to College sites received funding to ensure program sustainability through the FY2018 year. These sites included: Brockton (Bridgewater State), Framingham (Framingham State), Salem (Salem State), Springfield (Springfield Tech) and Worcester (Worcester State). Second, PIF grant funds were also allocated to enhance programs in Brockton and Worcester. In these communities, funds supported building partnerships within the community, recruiting students, and developing local program resources. With no additional state funding available, all 100 Males to College sites, irrespective of initiation date, are investigating how to leverage existing funding streams. For example, in some sites, higher education partners will distribute costs for future programming.

The state agencies, both ESE and DHE, continue to act as advisory bodies to local sites and convene learning communities to debrief common concerns and actualize next steps. Local 100 Males to College programs continue to iterate and learn by doing as they progress further in implementation. Programs have seen positive student learning

STATE POLICIES

DEFINING POSTSECONDARY SUCCESS

2016: The Massachusetts Board of Higher Education and the Board of Elementary and Secondary Education jointly approved a new definition of college and career readiness that includes three domains: workplace readiness, academic knowledge and skills, and personal/social development. Mostly recently, the boards approved a revision to Massachusetts' definition of college and career readiness to include civic preparation.⁶¹

BENCHMARKS FOR SUCCESS

2014-2015: The Board of Higher Education allowed higher education campuses to use high school GPA as a measure of a student's readiness for college-level math instead of a placement exam.⁶² Research indicates that GPA is a better predictor of college success compared to placement exams.⁶³

2016: The Commonwealth has established various resources/benchmarks to gauge students' preparedness for life after high school, before they complete a diploma. Resources include the:

- Massachusetts High School Program of Studies (MassCore), which recommends a set of high school courses to foster postsecondary preparedness and prevent enrollment in remedial/developmental courses in college; and the
- Early Warning Indicator System (EWIS) designed to help districts identify students who may be in need of additional assistance.

2017: The Board of Higher Education and the Board of Elementary and Secondary Education launched an initiative to support the growth and sustainability of high-quality early college partnerships connecting local districts and high schools to state institutions of higher education. This initiative is designed around the principles of equitable access for all students, integrating and aligning pathways for both college and career, increased student support in both academics and advising, connections to the workplace, and experiential learning opportunities, as well as fostering high-quality and deep partnerships between high schools and colleges. The first programs with a state designation will be launched in late spring 2018.⁶⁴

outcomes: successful completion of dual enrollment courses, attainment of a high school diploma, enrollment in postsecondary opportunities (higher education or career), and engagement with student services on campus to support retention over time.

State-Level Policy Supports

The work of the 100 Males to College sites provides insight into how the state can support the local implementation of college and career readiness strategies. In short, implementation efforts take extensive planning. State leaders can support this effort by enhancing data access and bringing together diverse sets of local educators to examine common sets of data indicators.

- **Convene partner sites:** Providing access to learning communities dedicated to specific problems of practice would support the work of educators as they plan and execute implementation efforts. For example, DHE supported a learning community for 100 Males to College sites by convening site leaders to discuss and reflect on the successes and challenges of the initiative.
- **Enhance access to and use of common data:** While Massachusetts is a leader state when it comes to public school data availability, there are important system linkages that the state can build that would make the vertical integration of data possible. Further, improved sharing of student progress data among high schools, institutions of higher education, and youth-serving community-based partners in the same community will provide increased opportunities for data-informed decision-making. The use of local and state-level data to plan targeted strategies for addressing gaps in college and career preparedness is a strength of the 100 Males to College approach. Referencing a common set of state-level indicators provided an opportunity for sites to plan for local outcomes to support college and career success. It also provides local sites the data needed to identify effective practice.



CONTINUOUS LEARNING For the Commonwealth

The local examples in this year's report provide insights into various elements of effective change processes at different stages of the education pipeline. The practices identified—both key and supporting—are at the heart of the local change processes that practitioners are using to drive toward improvement in student learning outcomes. Perhaps more importantly, these local examples provide a glimpse into the hard work communities are doing to construct and sustain locally determined improvement strategies while illuminating effective practices that may be replicable in other settings. While each example embodies its own approach, they all have some common elements defined by a **what**, or the purpose of improvement.

- Springfield is addressing gaps in school readiness by identifying and coalescing around a community-wide problem of practice.
- To enhance teaching and learning at the Dr. William Henderson K-12 Inclusion School in Boston, a team of educators articulated an evidence-based, school-wide intervention, focused on Universal Design for Learning principles.
- 100 Males to College sites statewide are using state and local data to plan for desired local college and career outcomes to meet postsecondary goals.

To complement the **what** of their improvement efforts, each local example also provides insight into **how** local practitioners have implemented strategies to address their identified improvement need.

- Educators in Springfield aligned community-wide operations and infrastructure to their problem of practice.
- Enhancements in teaching and learning at the Henderson school have been supported by continuous inquiry and data cycles.
- Community-wide partnerships focused on issues of college and career readiness have been facilitated by effective leadership teams of educators and partners within the 100 Males to College initiative.

Together, the **what** and **how** of the change process equip local improvement teams to clearly identify and prioritize a course of action that is appropriate to their local context. The practices highlighted as part of these three examples provide not only essential considerations for leaders across the education landscape, but also a helpful reminder and necessary reflection on our current approach to systems change.

What's Next for the Commonwealth

Reflecting on the lessons from local examples in light of opportunities for system-wide change, the Commonwealth must consider what schools, districts, and communities need to foster this iterative work. The consistent use of data is a universal theme across all three local examples: each example highlights how the use of state and local data can catalyze effective decision-making. By working with education leaders from communities across the Commonwealth, we know that local education practitioners are using data more than ever before. Considering this important trend, state leaders should focus on investing resources to enhance access to shared data sources and link systems between agencies and across communities. This will allow a variety of stakeholders in local communities to make data-informed decisions in the interest of student learning outcomes.

Equipped with data, practitioners and education leaders can think critically about where they are starting and how they can improve conditions and outcomes for students and teachers alike. The Department of Elementary and Secondary Education's District Analysis and Review Tools (DART) data system that provides school and district access to multiple kinds of data, and allows for tracking specific indicators over time, is one example of how an education agency can collect and disseminate data. To improve and scale this practice, the Commonwealth should consider how to vertically align systems across the departments of early education and care, elementary and secondary education, and higher education. An aligned preK-20 data system would increase the capacity of local education agencies, and local communities, to access and enhance data use.

Conclusion

The 2018 Condition of Education in the Commonwealth focuses on key ingredients in local change processes. Reflecting on the highlighted local examples that exist across the state, much can be learned about what is necessary for improvement and how to implement strategies to actualize and sustain improvement.

Continuous learning approaches have not yet found an ideal environment for comprehensive implementation in education. Just as has been the case in other fields, it is up to leaders in our public education systems to consider the adoption and adaptation of change management principles to drive system improvement. Here in the Commonwealth, for example, those most closely engaged with our public education systems continuously discuss the need to set a new vision for education reform, but our ability to rethink the terms and conditions that might define a new approach to reform has been limited. For Massachusetts to remain a national leader in education, and address persistent challenges in reaching the needs of all learners, the Commonwealth must pursue a purposeful approach to reform.

The 2018 Condition of Education in the Commonwealth report, and the Rennie Center's Change Management Framework, highlight one approach to continuous learning that has its roots in how local communities grapple with improvement. It promotes a specific, iterative, and purposeful approach to improvement. Banking on a cycle of new ideas, not yet tested with data, to catalyze improvement runs counter to the change management approach described in this report. So too does the notion that educators can lead a local change process—identifying problems, acting on data-informed decisions, and measuring progress against the desired outcomes—without needed supports. Therefore, the state might first consider structures that link data to improve access; offer opportunities for educators to test and reflect on new strategies; and provide authentic learning opportunities where educators can enhance their skills. In attempting to sustain this work at scale, the state must consider an infrastructure that can build on, document, and disseminate local improvement efforts.

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Research conducted and produced by the Rennie Center for Education Research & Policy

Chad d'Entremont, Ph.D., *Executive Director*

Jennifer Poulos, *Associate Director*

Sinead Chalmers, *Research & Policy Analyst*

Juanita Zerda, *Director of Implementation*

Laura Dziorny, *Chief of Staff*

Catherine Rauseo, *Communications Manager*

Annelise Eaton, *Senior Research Associate*

Peter Lorinser, *Improvement Specialist*

LaVonnia Montouté, *Program Manager*

Design Consultant

Lazar Design

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For more information about this report, please contact Chad d'Entremont, Executive Director, at cdentremont@renniecenter.org.

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