High-Dosage Tutoring

A HIGH-IMPACT LITERACY STRATEGY

DECEMBER 2024

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Introduction

The Literacy Landscape in Massachusetts

Massachusetts' education system is ranked near the top in many measures of aggregate learning, but these rankings don't tell the full story about how the Commonwealth's schools provide support at key points in a student's education. One of the most defining moments in a student's pathway is when they can become confident, independent readers. Studies have shown that students who are not reading proficiently by the end of third grade are four times as likely to drop out of school before earning a high school diploma.[1]

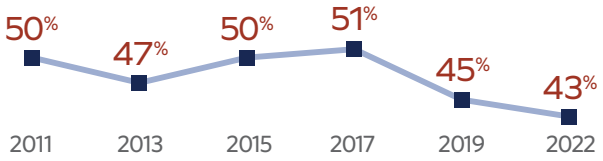
Although policymakers often focus on third grade reading proficiency, because that is the first year that all students take statewide reading tests, literacy experts know that earlier grades are especially pivotal for students who are developing their reading skills. In particular, students in first grade need to master a number of foundational literacy skills—such as letter sounds, common letter patterns, and sight word recognition—in order to develop the comprehension skills that will be critically important to navigate *every* academic subject going forward. Research shows that students who develop reading proficiency in first grade are more likely to be proficient readers later in life.[2]

Leaders in Massachusetts frequently cite the Commonwealth's reputation for educational excellence, but for that characterization to be accurate, policymakers must devote significant and immediate attention to early literacy. If we want to make progress toward our shared priorities around narrowing equity gaps and preparing all students for success in college and career, we must acknowledge the importance of early literacy—as well as the reality that this is not just an issue in urban centers, **it is a statewide crisis** as less than half our students are reading at the proficient level by third grade.

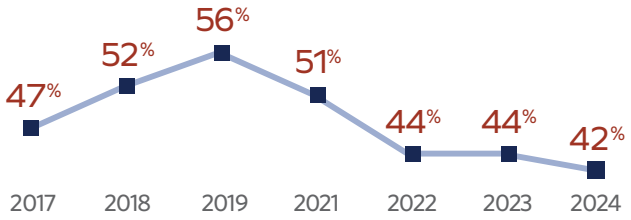
When we look at the recent history of literacy data in Massachusetts, the outlook is grim: student achievement is trending in the wrong direction, especially in districts that serve the greatest number of high-needs students—despite the historic amount of resources that the state and the federal government have sent to districts over the past few years.

According to national measures of student literacy (the National Assessment of Educational Progress [NAEP]), the level of proficiency among Massachusetts fourth grade students hovered around 50 percent between 2011 and 2017 but declined between 2017 and 2022. And according to state measures (the Massachusetts Comprehensive Assessment System [MCAS]), the level of third grade students who were proficient in reading

Percent of Students At or Above Proficient, 4th Grade NAEP Reading



Percent of Students Meeting or Exceeding Expectations, 3rd Grade MCAS



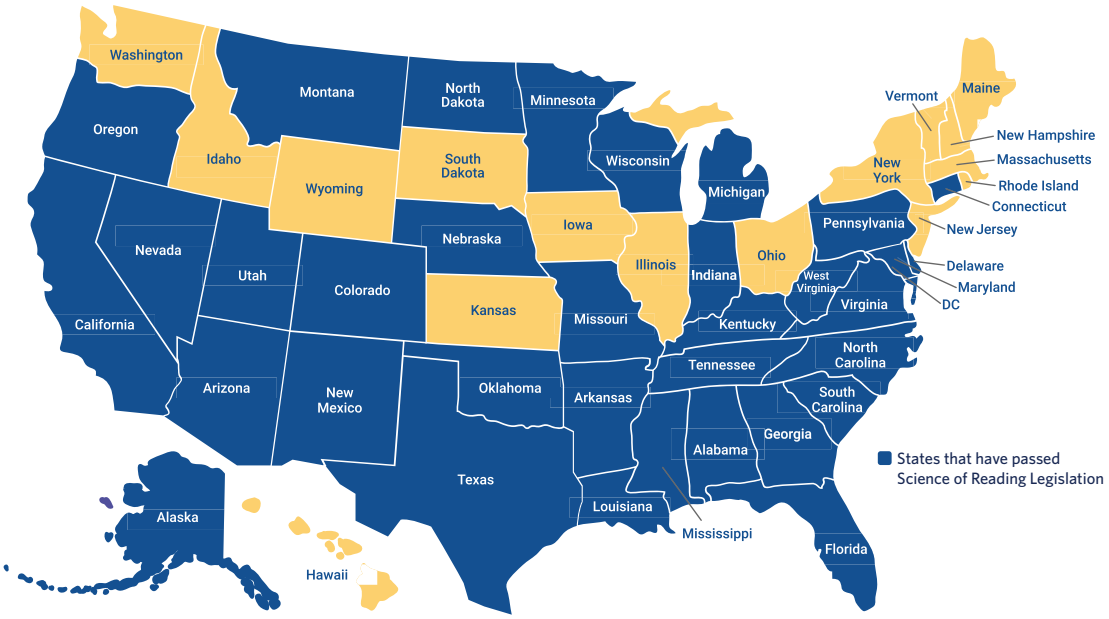
peaked in 2019 at 56 percent before dropping to 42 percent in 2024. This decline was undoubtedly influenced by pandemic disruptions, but the continued decline indicates systemic issues with our reading instruction.

State and district leaders must take action to reverse the slide—especially for students who are traditionally under-represented in higher education and high-growth industries. If the state truly leverages high-impact literacy interventions at scale, we can help students reach new heights that go beyond the levels of achievement that we saw before the pandemic. And because literacy proficiency is such an important factor across all academic subjects, these efforts will lift student achievement across many different grade levels and content areas.

We see a real need for more urgency and more innovative thinking around strategies that have been proven to make significant impacts on student achievement and how to scale those opportunities in places where students could benefit most. One such strategy is high-dosage tutoring, which research shows can have transformative effects on student learning. In some programs, learning rates doubled or tripled for students participating in high-dosage tutoring.[3]

Unfortunately, there is a major barrier preventing the Commonwealth from growing these programs: Massachusetts is significantly behind other leading states that have required the adoption of literacy curricula that are informed by an established body of research and evidence proven to be most effective in meeting the literacy needs of all students. The lack of statewide adoption for these proven literacy curricula significantly hinders student acquisition of foundational reading skills.

Most states across the country have passed a statewide requirement that districts and schools use high-quality instructional materials (HQIM) that are **aligned with the science of reading**. Massachusetts is one of just 16 states that does not have this statewide requirement. As a result, a study from The Boston Globe showed that almost half of school districts are currently using reading curricula that the state classifies as low-quality.[4] Massachusetts should work quickly to adopt an HQIM statewide literacy curriculum requirement.



The Importance of High-Dosage Tutoring

Although policies to expand adoption of high-quality instructional materials are vitally important, we also know that these efforts will not be enough to ensure that *all* students will achieve reading proficiency. Research shows that up to 60 percent of students need intensive instruction and frequent repetition of targeted practice in order to learn foundational reading skills, even if they are in a school that uses a science-based reading curriculum.[5] For some children who come to school with little basic alphabet knowledge, high-dosage interventions are necessary. It is important that all students learn these basic literacy skills so that they are able to effectively shift from "learning to read" to "reading to learn." These students need a more intensive intervention in order to succeed, and one of the strategies that has proven to be most effective at helping these students catch up is high-dosage tutoring.

The research clearly shows that high-dosage tutoring can have transformative effects on student learning. A recent meta-analysis of tutoring programs showed that there is a large positive effect on student achievement across the different models included in the study.[6]

But it is important to note that the evidence base also underscores another key aspect of high-dosage tutoring policies: **program design and implementation fidelity are key factors**. Research has shown that certain pro-

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grams have mixed results when scaled to serve large numbers of students, and these mixed results have largely been attributed to program design.[7] Programs that meet certain standards such as minimum student-to-tutor ratios are more likely to have positive impacts, and schools that use strategies such as online delivery models are more likely to build successful programs that reach more students while maintaining quality. Centralized approaches to high-dosage tutoring can also help individual districts avoid the need to devote scarce resources toward program logistics, such as identifying and training tutors.

A group of researchers has developed a set of design principles that can be used to guide the development of high-dosage tutoring programs and ensure that they are effective:[8]

PROGRAM CHARACTERISTICS	BEST PRACTICES
Tutors	Paid, but no educational requirements; must prioritize relationship building with a consistent tutor that is assigned to each student
Tutor Training	Formalized tutor training and continued support
Days/Week	≥ 3 days per week
Time of Day	During school
Instructional Materials	Backed by the science of reading and aligned to state standards; targeted to data on students' specific needs
Assessment	Used consistently to track progress and adjust approach

We know that some states and districts are leveraging the high-dosage tutoring model to focus on boosting literacy rates for students as they approach key learning milestones. For example, the Charlotte-Mecklenburg school district in North Carolina—which serves over 140,000 students—worked to establish a partnership between 16 elementary schools and a tutoring partner (Once) to provide targeted early literacy high-dosage tutoring for students in kindergarten and first grade. The tutoring partner provides training, scripted instructional materials, and weekly video coaching to all tutors who participate in the program. The program is also participating in an ongoing study by a group of researchers at Stanford University's National Student Support Accelerator, which will study the effectiveness of these interventions on student literacy growth.[9]

A similar approach has been taken in Massachusetts, where private philanthropy has worked with a select number of school districts to fund a proof-of-concept program for virtual early literacy high-dosage tutoring programs focused on first grade students who are reading behind grade level (based on diagnostic screening data).

Recent Research on the Effectiveness of Virtual Early Literacy High-Dosage Tutoring for First Grade Students

In order to study the effectiveness of virtual early literacy high-dosage tutoring interventions for first grade students, researchers from the Center for Research and Reform in Education at the Johns Hopkins University (JHU) School of Education conducted an analysis of a specific program being implemented in Massachusetts through a partnership between an organization called Ignite Reading and the One8 Foundation.[10,11] The researchers, with support from the One8 Foundation, set out to evaluate a number of research questions about the high-dosage tutoring partnership program. They looked at whether first grade students in the Ignite Reading/One8 program, receiving virtual early literacy tutoring, experienced greater gains in literacy growth compared with their expected growth based on national average. The researchers also compared the reading gains realized by program participants with the progress made by academically similar students in the same districts who did not participate in the program. And they also conducted a qualitative analysis of educator perceptions of the intervention.

The program model used by Ignite Reading is characterized by a few key design features. Participating students receive instruction from well-trained reading tutors through a virtual delivery model, with a ratio of one instructor for every student (1:1). The instruction is provided for 15 minutes each day by the same tutor, and it happens during the regular school day. And the tutors providing the instruction—who can be located anywhere because of the virtual delivery model—have received at least 60 hours of professional learning, are regularly evaluated

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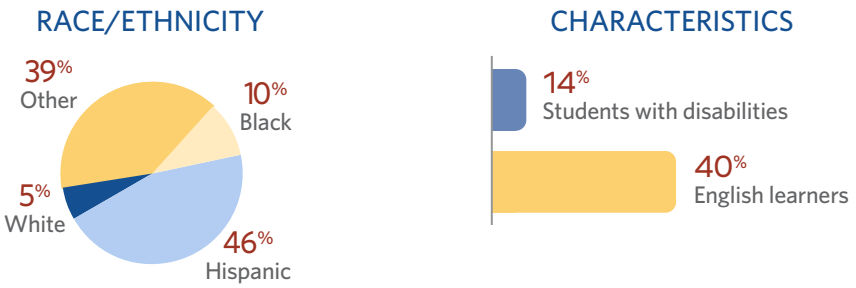
and provided with feedback, and are also paid for their work. The program is also driven by data collection and analysis—tutors collect baseline diagnostic data, conduct progress monitoring, and hold regular meetings with school educator teams to analyze the latest information and use it to inform implementation.

The Ignite Reading/One8 partnership program aimed to close first grade literacy gaps by focusing on students who had scored below their expected benchmark levels, and the program also had an intentional focus on working with districts that serve large numbers of high-needs students.

In the 2023–24 school year, Ignite Reading worked with 46 schools in 13 districts across the Commonwealth that received grant funding from One8 for their high-dosage tutoring programs. To receive those grants, districts had to be using a proven core curriculum based in the science of reading or be in the process of adopting one. This is necessary to ensure that the high-dosage tutoring program complements the literacy instruction that students are receiving in their classroom. When classroom teachers are using evidence-based, strongly rated curricula in their core instruction, students get the most out of the combination of core instruction and Ignite tutoring, experiencing an instructional approach that is aligned, additive, and coherent rather than conflicting and confusing. It is also important to note that all the districts participating in this program offered professional development that was aligned with science of reading standards.

While the Ignite Reading/One8 partnership program funded high-dosage tutoring for just over 2,200 students in the 2023-24 school year, the JHU researchers looked at students who participated in the program for whom pre- and post-test data were available: 1,929 first grade students across 46 schools and 13 districts. The group of students had diverse representation across various student subgroups.

Demographics of JHU Study Participants

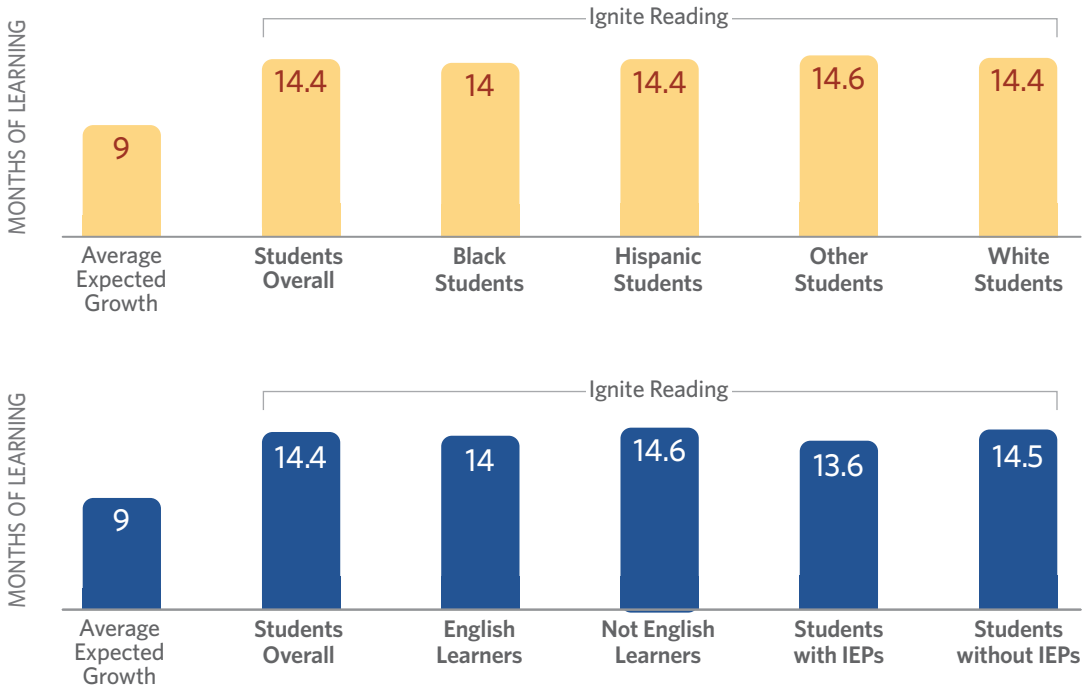


In JHU's study, the researchers used data from a standardized, high-quality assessment called DIBELS to measure growth in student learning. DIBELS is administered three times during the school year, including at both the beginning and the end of each year, and is widely used to assess students' reading skills. To conduct the study, the researchers looked at Ignite Reading student data on their beginning of year (BOY) DIBELS test scores and their end of year (EOY) DIBELS test scores. The researchers then compared Ignite Reading students' actual literacy growth to normal rates of growth for students across the country to understand how Ignite Reading students' growth compared. In addition, for a subset of participating districts, the researchers looked at data across all first grade students to understand how Ignite students grew relative to comparable students in the same district who did not receive Ignite tutoring.

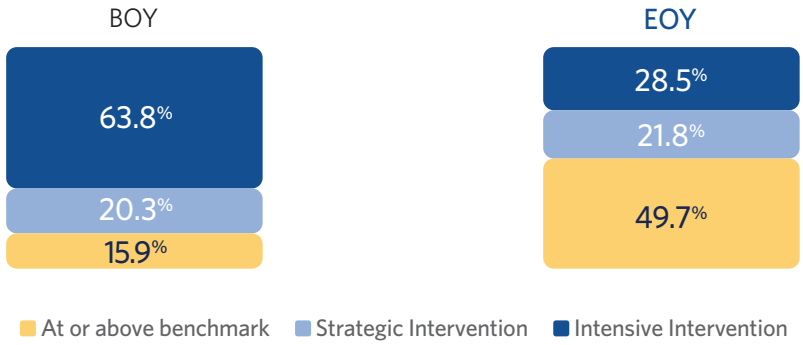
The study found that the Ignite Reading virtual early literacy high-dosage tutoring intervention produced substantial, significant results for first grade students:

- Participating students **gained five and a half months of additional learning** on average relative to normal student growth across the country.
  - All student subgroups experienced substantial additional learning gains from participating in the program, including Black students, Latino students, English learners, and students with disabilities.

Additional Months of Learning Gains by Student Subgroup

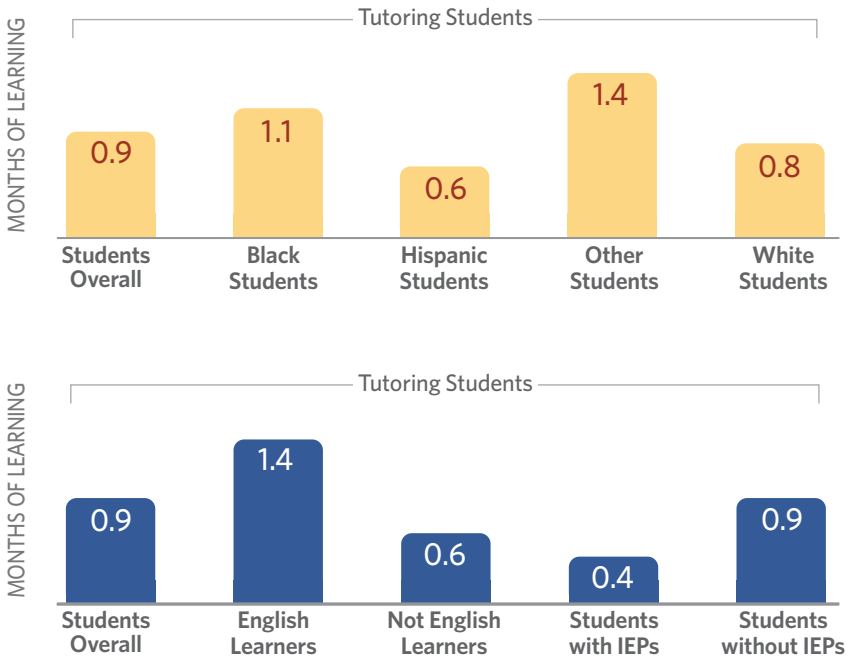


- Students in the program were significantly more likely to be reading on grade level by the end of the year: just 16 percent of participants met the grade level composite score benchmark on the BOY DIBELS, while 50 percent of participants met the grade level composite score benchmark on the EOY assessment.



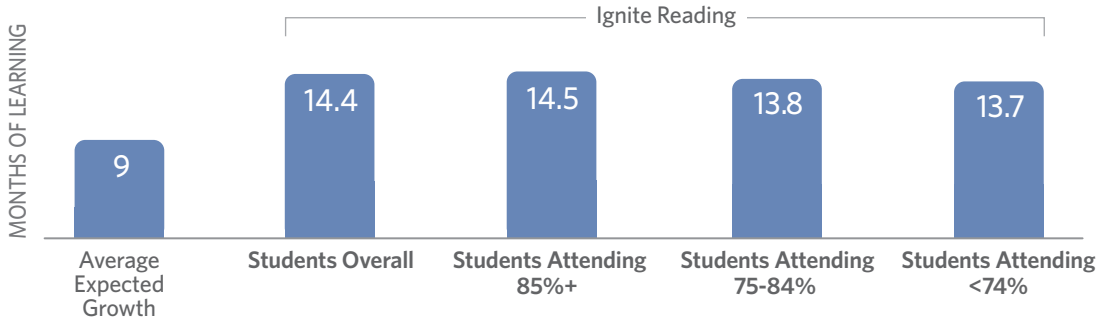
- Participating students from a subset of districts where data from all first graders were available grew at rates that were significantly higher than the growth rates of academically similar peers in their districts.

Additional Months of Learning for Ignite Reading Students



- Student attendance remains an important factor—while students averaged 88 percent attendance for tutoring sessions, students with higher attendance rates experienced more growth than those who were absent more frequently.

Additional Months of Learning by Attendance



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Recommendations for Massachusetts Policymakers

There is growing recognition among parents, educators, and policymakers that Massachusetts is well behind other leading states when it comes to establishing a rigorous, science-based framework for helping all students to read on grade level. Stories published by The Boston Globe have raised awareness of the problems caused by a lack of a science-based reading curriculum requirement, and although Massachusetts has made incremental progress toward expanding the adoption of HQIM, state leaders must do more. Given what we know about how HQIM are not enough to help all students, **it is imperative that high-dosage tutoring be prioritized and scaled** to greater numbers of students across the state.

This new proof-of-concept tutoring work in Massachusetts, coupled with research from JHU, should provide guidance on how we can collectively channel this growing momentum toward literacy solutions that are proven to have a significant impact on students. While philanthropic funding has piloted effectiveness, state funding is needed to continue and meaningfully expand and scale this work so that it is a predictable and coherent part of the state literacy ecosystem that is available to all students who are showing gaps in their literacy skills.

As policymakers continue their efforts to strengthen literacy policy across the Commonwealth, they should work to establish a **first grade literacy safety net** for students across Massachusetts by enacting policy conditions that would encourage the growth of high-dosage tutoring programs:

- **The state legislature should pass a law requiring that districts use science-based literacy curricula** to ensure that all students have access to a high-quality curriculum—and also to ensure that the state is able to scale effective strategies such as early literacy high-dosage tutoring across all systems.

- The Healey administration, in partnership with state legislators, should **commit to an annual state investment of at least $25 million for early literacy high-dosage tutoring programs focused on first grade students across the Commonwealth**—either through a dedicated set aside within the Literacy Launch line item, or through a separate **line item** appropriation.
  - The administration should provide a **funding commitment** for at least 5 years, in line with the commitment for the Literacy Launch program, to ensure that sustained state funding is sufficient to replace the current reliance on philanthropic funding which was positioned as a proof-of-concept source of support with the grant concluding this year. Naming a specific time period for funding support would allow districts to integrate these high-dosage tutoring programs into their multi-year planning processes, and it would also allow the state to explore the possibility of moving to a cost-share model in future years.
  - The Administration should also ensure that newly-available federal literacy funding—namely the new $38.4 million in federal funding secured through the Comprehensive Literacy State Development grant—can be leveraged to supplement efforts to grow high-quality high-dosage tutoring programs for first grade students across the state.
- State leaders at the Department of Elementary and Secondary Education should create a rubric for identifying and evaluating providers that could implement high-dosage tutoring programs at scale across the state, and then enter into contracts with a small number of vendors who meet the requirements.
  - District leaders would then have the choice of opting into a partnership with whichever state-approved provider best met their specific needs.
  - State leaders would need to build capacity at the state level to manage the contract with an eye toward quality control, oversight, and consistent implementation across districts, replicating the conditions in place under the pilot.
- District and school leaders should work to ensure that high-dosage tutoring programs for first grade students are integrated into Multi-Tiered Systems of Support (MTSS) frameworks being used by schools to meet the needs of all student groups, including students with disabilities and multi-lingual learners.

ENDNOTES

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11 Note: this JHU research was commissioned by the One8 Foundation and focuses on schools implementing virtual early literacy HDT programs that were funded by the One8 Foundation

ACKNOWLEDGMENTS

We would like to express our gratitude to the researchers at the Center for Research and Reform in Education at the Johns Hopkins University (JHU) School of Education, whose evaluation of the Ignite Reading high-dosage tutoring program in Massachusetts undergirds the analysis and recommendations detailed in this report. Thank you to Ignite Reading for sharing data and insights about their program. Finally, thank you to the One8 Foundation for supporting this paper and for their leadership in establishing a proof of concept for early literacy high-dosage tutoring in Massachusetts.

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