Turning the Page: Refocusing Massachusetts for Reading Success

Strategies for improving children’s language and literacy development, birth to age 9
On a blustery summer day at Fenway Park, 40,000 fans watch a towering pop-up fall in a strange spiral as three Detroit Tigers dance below, gloves opened, attempting to catch it. The windblown ball drops to the ground near second base, prompting two 10-year-olds seated in the bleachers to react. One of them, Nathan, cheers and jumps up in delight. Several rows away, 10-year-old Isabella sits down dejectedly and sighs. Unlike Nathan, she knows the Red Sox batter is automatically out via the Infield Fly Rule—and she’s bothered that the Red Sox rally appears over.

It’s been going this way since the group arrived at the ballpark three hours earlier—same play, different reactions.

In the third inning, the announcer informed the crowd that the Red Sox hit was ruled to have gone just to the left of Pesky’s Pole. Isabella joined the fans who cheered for the home run. Nathan didn’t get what all the fuss was about. Then in the sixth, when fans loudly applauded a Tigers relief pitcher—long a local favorite when he played for Boston—Isabella smiled and clapped as Nathan sat quietly, unaware of why the opposing pitcher was given such a warm reception from the Boston fans. As the complexities of the competition continued to appear, Isabella felt her pulse quicken. She enjoyed each play, but also ran through scenarios of what might happen next. Nathan, meanwhile, felt his interest wane. A chaperone seated nearby tried to keep Nathan engaged by giving him key information at relevant moments, jogging his memory about a player who was recently in the news, and explaining some of baseball’s odd plays and rulings.

Isabella came to the ballpark with her baseball facts in order. She has been a fan since kindergarten and by the third grade was using a scorecard to record the action. She peers through binoculars to try and catch the signals coming from the dugout and checks the bullpen to see who is warming up. Her dad has mentored her along and will have watched this game on TV. When they talk after the game, they’ll probably have different impressions of what went on and different thoughts about the way the Sox played.

Nathan and Isabella both stayed through to the end of ninth inning, but they walked out onto Landsdowne Street having had very different experiences because of what they “brought” to Fenway, their background knowledge about baseball and understanding of baseball vocabulary.

What does watching baseball have to do with reading?

When someone goes to watch a baseball game, it’s much the same as picking up a book to read. The value of each experience varies from person to person, even though the plays on the field and the words on the page don’t differ. The Fenway experience will be superficial or deep, broad or specific, depending upon your prior experiences and whom you sit with in the stands. Everyone gets something from having gone to the ballpark, just as all readers get something from having read the book, but the novice is at a disadvantage from the first inning or the first page.

The people around can help support the experience, whether it is watching an unfamiliar game or reading a book with difficult language or unknown subject matter. Just as the chaperone helped Nathan stay attached to what was happening on the field, an inexperienced reader benefits from having someone next to him, elaborating on what is going on in the text and discussing new words and concepts encountered. Isabella and her dad share a love of baseball, and she plays in the local little league; she brought with her years of accumulated knowledge and interest in the game. This influenced what she attended to, how motivated she was to stay for all nine innings, and her excitement about returning to the park again soon.

What children bring to the reading experience and what kinds of supports we provide greatly determine what they will get out of it. Without relevant background knowledge and vocabulary or someone there to support them, the Nathans in our communities probably won’t be in any big hurry to go back to Fenway, or to grab another book from the shelf and dive in.
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Executive Summary

Many are applauding Massachusetts’ reading scores on national and state tests, yet substandard performance is prevalent in the suburbs and the cities. Forty-three percent of our third graders (two-thirds from low-income backgrounds and one-third not low-income) do not read at grade level. These children deserve our serious attention. The costs of reading failure are high; the majority of this large group will go on to experience significant academic difficulties, jeopardizing individual potential, and also compromising our society’s vitality. At the same time, meeting “proficiency” on state or national tests does not guarantee success in college or the workforce, as proven by both the rates of incoming freshmen who need remediation, and the underpreparedness of new college graduates for the literacy demands in the workplace.1 With the goal of improving third-grade reading statewide, and for all children, we undertook a study of external and in-school barriers to reading achievement. Our findings call for a major, comprehensive refocusing of our efforts to create strong readers in the Commonwealth; we must do more, and we can do better.

To refocus Massachusetts on reading success, we should direct our efforts toward improving the quality of infants’ and children’s language and reading environments across the many settings in which they are growing up, playing and studying. Why focus on quality? A decade into this 21st century, science has never been as clear and convincing about the long-term effects of the quality of a child’s early environment and experiences on his brain architecture.2 These lay the foundation for important outcomes, including children’s reading and academic achievement, and are also related to how well a child will be able to think; every new competency is built upon competencies that came before.3 Similarly, science has never been as clear and convincing about how dependent reading skill is upon high-quality environments and experiences. Becoming a skilled reader—one with strong language skills, well-developed knowledge about the world, and critical thinking skills—is a process that begins at birth and continues through to adulthood.

Given today’s sophisticated science of language, reading, and child development, we could capitalize more on what we know. So in pursuit of better reading outcomes, we need to take a more scientific and a more preventive approach. We need to alter our course, and this involves revisiting some basic assumptions and practices. First, we need to think more broadly about reading itself, which means much more than deciphering words on a page. We also need to commit to identifying the struggler, long before that child takes the third-grade reading test. In addition, we need to think more broadly about who can promote children’s reading development, and then support them to do so. This means educating and supporting adults in classrooms and homes, and also adults working in early education and care settings and other parts of communities. Finally, we need to rethink our indicators of success. Currently, many programs and supports are using “reach”—the number of children and/or families served—as the indicator of success. Instead, we need to become more strongly committed to using impact on children’s outcomes as the indicator, which necessarily demands high-quality programs and supports.

Massachusetts at a Glance

480,422 children ages 0-5
70% of young children in early education or care settings
1 million school-age children
149 home languages
1 in 6 children comes from a multilingual home
310 school districts
1,846 schools
70,396 teachers

The recommendations we present are rooted in several sources and lines of study. We drew on the findings from the most current and salient research, including seminal national reports, policy reports, regulations, state guidelines and standards, and relevant national and state-level data. We also undertook research in 15 communities, cities and towns, to get a sense of trends and a snapshot of services and programs that promote children’s language and reading development and provide support for those who are struggling to read in Massachusetts. An Advisory Committee comprised of individuals with significant knowledge in education policy and practice offered key insights and helped shape the study design and recommendations in important ways.

Our analysis of the collective efforts in the Commonwealth to promote children’s reading revealed a vast quantity of programs and supports. Many of these are designed to effectively support reading, but suffer from low-quality implementation, while others lack sufficient intensity to encourage the lasting behavior changes in children and/or adults that will lead to reading success.
As we have learned from so many other efforts to promote children's health and well-being, to have an impact across the state and boost all children's reading requires a multi-pronged approach. In many cases this is not about new resources, but about reallocating resources—doing a better job of what we are already doing. In other cases, we need a new approach. And, building off of prior learnings, much of this is not about mechanical solutions. At the core of this comprehensive plan are intensive capacity-building efforts—increasing adults' and children's competencies related to assessing, supporting and promoting children's language and reading development, from birth to age 9.

This report features five recommendations for producing measurable success in children's reading outcomes. These recommendations are outlined below and described in detail in the following pages.

1. Program Design and Impact: Reallocate funds and alter policy to ensure programs are delivered with sufficient intensity, effectively.


3. Professional Education: Increase adults' capacity to assess and support children's language and reading development.

4. Curriculum: Bring language-rich, rigorous and engaging reading curricula into early education and care settings, as well as PK-3 classrooms.

5. Partnerships with Families: Expand and strengthen work with families across learning settings and within communities.

This is not about sounding an alarm; it is about ringing the bell louder, so that our policymakers, philanthropists, educators, medical professionals, business and community leaders, parents, and caregivers take note. While there are committed and hard-working people devoting every day to helping children become proficient readers, the end result still falls far short; often our efforts to improve outcomes do not translate into reading success. Yet Massachusetts is rich with intellectual capital, including more universities and colleges per capita than any state in the nation, it is steeped in a history of public education for all its children, and it is small enough geographically to be amenable to statewide initiatives to promote reading proficiency. Capitalizing on these attributes, we can make key changes that will improve our children's health and well-being, elevate the bar for children at every reading level, and make a difference to our knowledge-based economy and to our society. We must pull our at-risk readers along and we must push all readers forward. It is time to turn the page.
What is Reading?

Reading for success in the 21st century means much more than deciphering words in a text. It means accessing, evaluating, and synthesizing information, and it therefore creates a foundation for learning across all academic domains, including math, science, and social studies. It is inextricably linked to overall academic success. Effective reading is at the heart of being an engaged, global citizen who is able to grapple with complex issues. The skilled reader works in shades of gray, confronts problems that can only be solved by integrating ideas from multiple resources; he understands a wide range of concepts, and he has interdisciplinary knowledge to access and apply. When we read successfully we absorb literature and non-fiction for pleasure, to acquire information, and to broaden our horizons. Skilled readers also have the sophisticated oral and written communication skills needed to respond to ideas—whether presented on screen, in print, or via audio—and to generate new thinking.

Reading words, then, is necessary but not sufficient to support text comprehension. To read effectively and make meaning from text, one has to bring much to each reading experience. A reader must be engaged in the process and motivated to work through each sentence, paragraph and page. But interest alone will not ensure comprehension. She must have knowledge of the code—the way sounds are associated with letters and blended together to make words—coupled with the ability to read them quickly enough to retain what is read from the beginning of the passage to the end. As she reads these words, she must also successfully recognize the concepts they represent to make meaning of the text. To do this, the reader draws on her background knowledge, constantly applying what she already knows about the reading process and the text's topic while making her way through the word-covered pages. Ultimately, she is advancing her knowledge. But if the words and/or the topic are completely unfamiliar or just too difficult to grasp independently, then sounding out the words may look like “reading,” but it is simply an exercise, unsupportive of learning.

The process of becoming an effective reader is a dynamic and complex one that must begin at birth and continue into adulthood. “Reading” at age 3 is not the same as reading for a 5-year-old, which is not the same as skilled reading for a 9-year-old, and none looks similar to skilled reading for a college student. A reader’s ability has to keep pace with the changing demands of the context and the purpose for reading—and that demands continual growth. This growth depends upon strong and supportive interactions among adults and children, to build up children’s language and knowledge, and to increase the amount of time their eyes spend on print. Throughout the day and throughout the early years especially (birth to 9), that means asking questions, starting conversations, telling stories, and singing songs. It means listening to stories via audio, drawing letters, writing names as well as writing stories, letters and essays. It means visits to local parks, libraries, and museums. It means teaching children to read independently and it also means everyone reading together. It is these interactions and everyday activities—in our homes and communities, our early education and care settings, and our schools—that foster an orientation toward learning and inspire children's sense of curiosity about the world and greater understanding of it, while simultaneously promoting their language abilities and their thinking.8

Opportunities to promote our children’s reading skills are abundant in all settings, including our kitchens, backyards, community centers, churches, clinics, grocery stores, local businesses, and, of course, our early learning settings and school classrooms. High-quality experiences and relationships provide babies and children with ongoing opportunities to talk and to learn. Over time, quality interactions will help children build their language skills and the essential background and conceptual knowledge that they will need not only to read high school and college texts, but to compete successfully in this knowledge-based economy.8
Only through a comprehensive effort will we ensure that our children’s reading skills are sophisticated enough to match what it means to be literate at each stage of development. By doing so, we will support the health and well-being of our children and society.

The High Costs of Childhood Reading Failure

Reading is the cornerstone of academic success and also central to a child’s overall health. There is a limited window of time in which to prevent reading difficulties and promote reading achievement; for most children what happens (or doesn’t happen) from infancy through age 9 is critical. By third grade, reading struggles are strongly linked to later school difficulties, as well as behavioral problems, depression, and dysfunctional and/or negative peer relationships.9 What’s more, research indicates that 74 percent of children whose reading skills are less than sufficient by third grade have a drastically reduced likelihood of graduating from high school.10 As a result, these children are unlikely to develop the skills essential for participating fully in this knowledge-based economy and for experiencing life success.11

While dropping out of high school is detrimental to life outcomes, even students who do graduate from high school are at a significant disadvantage if they do not earn a college degree. Yet, it has never been as clear as it is today that a high school diploma does not necessarily translate into college eligibility or readiness. Nationally, nearly half of students who graduate from high school are not academically prepared for college and are considerably less likely than their well-equipped peers to earn a degree or certificate.12 Once enrolled in college, a large proportion of students are assigned to remedial reading classes; 70 percent of this group of struggling readers does not earn a degree or certificate.

When children are not given the appropriate opportunities to learn, both the individual and society suffer. As compared to the full-time worker with a high school diploma, the individual with a four-year college degree is much more likely to report being in excellent or very good health, is more likely to vote, is less likely to smoke and engage in other harmful behaviors, and earns 62 percent more income.13 Thus, the costs of childhood reading failure include increased public expenditures coupled with decreased revenue and human capital. Undoubtedly, low reading starkly reduces our potential both as individuals and as a society.
How are We Doing in Massachusetts?

On the surface, it may appear that Massachusetts is producing strong readers. In 2009, for example, Massachusetts had the highest fourth-grade reading score in the nation. Underlying our high average on the national test, however, are some very disconcerting trends. Fifty-three percent of our fourth graders scored below proficient on this same measure, just as 43 percent of our third graders scored below proficient on the latest Massachusetts Comprehensive Assessment System (MCAS) reading test. There are two significant issues to address moving forward.

First, we are doing a substandard job serving all students. Our students who identify as African-American and Latino, our students from low-income households, our students with disabilities, and our students who speak English as a second language—perform well below the national average. Not surprisingly, these patterns have been glaring in our MCAS results since 2001, when measurement began. For example in 2009, 65 percent of grade 3 low-income students scored below proficient on the reading portion of the MCAS. Meanwhile, income inequality in the Commonwealth continues to increase and the enrollment of students from linguistically and culturally diverse backgrounds is similarly on the rise. Finally, it's important to note that almost one-third of students who are not from low-income backgrounds are also not proficient readers at grade 3.

Second, we may have a false sense of security that our readers who do reach proficiency are inoculated against later difficulties and destined for success. In fact, we should be concerned about positioning all of our students—even those who are top-performing nationally—to be competitive in the global marketplace after college. Important data suggests that we may be overly focused on “proficiency” as the end-goal for our nation’s students, instead of as a necessary and important milestone. On international comparisons, many of our top performers demonstrate lower levels of achievement than the high scorers in other countries, and our results suggest more room for improvement overall. For example, on the 2003 PISA (Programme for International Student Assessment), only 30 percent and 12 percent of U.S. students scored in the highest category on the reading and problem solving sections, respectively.

Moving closer to home, educators in many colleges and universities, including elite institutions, report a steady decline in students’ critical thinking, reading, and writing skills. With 85 percent of all college learning occurring through independent reading, the reading demands in college are substantial. The average undergraduate course requires 80 pages of reading per week, with content far more challenging than that encountered in high school. While Massachusetts has not yet systematically collected statewide data on the percentage of college freshmen who need academic support, remediation is a significant issue in the state. It is not an issue relegated only to our state colleges, where more than one-third of our own freshmen take at least one remedial course in their first semester; many private colleges and universities, at every level, report growing curricular and ensuing financial challenges to meeting the academic needs of entering freshmen. Based on national statistics, we know that many of these students will not go on to earn a degree, yet many will incur significant financial burden and debt load in financing the courses they do enroll in. In addition, they bear the negative psychological experience of failure and perceived inadequacy shortly after admittance.

Finally, at the high end of the wage scale, a growing sector that demands academic skills more difficult and diverse than those required for college, leaders across professions report a troubling deficiency: The current generation of young people hired for entry-level positions appear under-prepared to meet the literacy demands of the workplace.
Our Road to Five Recommendations

With the goal of improving grade 3 reading, statewide, we undertook this study of external and in-school barriers to improving reading proficiency for all third graders. Our analysis induced us to generate a set of recommendations and corresponding action items to guide next steps in the state. An Advisory Committee comprised of individuals with significant knowledge in education policy and practice, played an influential role in shaping the study design and recommendations.

Study Sources and Methods

The recommendations we present are rooted in several sources and lines of study. We drew on the findings from the most current and salient research, including seminal national reports (From Neurons to Neighborhoods: The Science of Early Childhood; Early Childhood Assessment; Report of the National Early Literacy Panel) and studies and evaluations from a number of disciplines. Although written primarily for researchers, these studies provide an excellent basis for the foundation of a document to guide policymakers, instructional leaders, educators, health care professionals, community leaders, early education and care providers, parents, and caregivers concerned with our children’s reading outcomes. In addition, we reviewed policy reports, regulations, state guidelines and standards, and relevant national and state-level data. Finally, we also undertook research to get a sense of trends and a snapshot of services and programs that promote children’s language and reading development and provide support for those who are struggling to read in Massachusetts. Given the myriad of services and programs available for children and families all over the state, we knew it would be impossible to find and examine every offering in the Commonwealth. However, we did want to investigate many local-level issues, including the variety of school and community efforts to identify and support at-risk and struggling readers (e.g. before and after school classes, summer offerings, library programming), and corresponding guidance given to parents and caregivers. To get this information from a cross-section of settings, we chose five cities/towns at each of three income levels (low, medium and high, based on state data), also stratified by demographics and geographic region, and conducted phone surveys (all participants were assured confidentiality) and website reviews. While our search was not comprehensive, it did help readily uncover a number of consistent findings across the 15 locales. Together, these sources of information and data informed the development of our recommendations. After organizing our findings, we presented the key issues uncovered to the Advisory Committee for further review and feedback.

Scope of the Report

To ensure this research was both meaningfully in-depth and squarely focused on improving third-grade reading as the desired outcome, we limited its scope. Knowing what we know about the fundamental importance of language-rich, print-rich, and cognitively stimulating interactions in promoting children’s reading development, we concentrated our investigation on how to augment the quality of the experiences and relationships inherent in the many settings in which our children are growing up, playing and studying—our programs, services, community centers, early education and care settings, homes and schools—so that they set our children up for reading success.

It is important to note, however, that there are a multitude of influences on language and reading—macro and micro—and to limit our scope to those factors that we studied and presented could, on the surface, seem like a gross oversimplification. Too many of our children come to our early education and care settings and schools hungry or much too tired, with behavior challenges, without corrective lenses or needed hearing aids, struggling with asthma, untreated health conditions, or without a sense of physical and psychological safety. These are just some of the many child-level factors that influence overall learning and development, including reading success.

How do our recommendations connect to broad policies that promote children’s learning and development, such as access to early education and care, universal preschool and a longer school day? They directly inform the implementation of those policies. It is not enough to simply universalize access to any given setting, we need to universalize access to high-quality settings to promote our children’s reading outcomes. And this is not yet our norm. By integrating the content of these recommendations into each policy’s core, we will be a step closer to giving children an opportunity to reach their potentials.
Where Do We Go from Here?

In what follows, we present five recommendations, each of which is supported by a rationale and includes specific action steps. More detailed suggestions for implementing the recommendations are spelled out in a matrix we have placed in the Appendix. This document contains attainable goals for the many stakeholders who support and promote children’s reading development in the Commonwealth.

1. Reallocate funds and alter policy to ensure programs are delivered with sufficient intensity and effective implementation tactics—producing measurable success in children’s language and reading.

There is clear evidence that programs designed to support children’s early environments and experiences—especially in the domains of reading and language—can have positive impacts that extend into adulthood, enhancing life for individuals and communities. Unfortunately, despite great promise and significant effort in design and execution, most interventions have been shown to produce negligible effects. Stakeholders are thus left discouraged: Funders and providers feel the sting of wasted time and money; families and communities lose sight of their children’s promise. Therefore, it is critical to develop a new approach to promoting language and reading in early childhood that ensures programs and children reach their potential.

One might wonder—why a new approach and not necessarily new programs? Many of our current programs and supports don’t necessarily lack in good design—what they most often lack is heft and longevity, and/or high quality implementation to impact outcomes. For example, weekly tutoring for struggling students or a one-time parent education event on shared home reading practices may be appropriate in design, but not intensive enough to make a difference. As we aim to promote and support children’s language and reading development, we must be sure that, above all, we’re focused on the quality and impact of our efforts. Across the day and across the years, we need a precise understanding of whether we are promoting children’s language and reading skills, and how we are doing it.

To achieve this goal, we need to think about our programs and services in a more nuanced way. We need to be guided by the understanding that it is not the services or the programs themselves that are impacting children’s skills specifically, but rather it is the resulting changes in behavior for both the child and the adults in his environment that are having an impact. For example, giving a book to a child is only a step toward improving literacy outcomes. Working in partnership with early educators or parents on how to use the book as a resource—that is our imperative. There are fairly precise techniques for inciting rich conversations, fueling the imagination and building a love of reading that can propel the child toward the book shelf the next day and the day after. If we execute our programs appropriately, we may even propel the child to hand his book to the nearest adult to engage in shared reading, or cue the adult to engage the child. Together, it is these behaviors and interactions that begin to build a foundation of early literacy skills, and promote the cognitive development that

Catching Our Kids Early: Boosting Language for Later Reading Success

Simone was connected to Early Intervention (EI)—a statewide, family-centered, developmental service—by her daughter’s pediatrician. Now, a typical Wednesday morning for Simone and daughter Talita begins with a visit from Rebecca, an early-childhood specialist. On one particular visit, before their circle time routine, Simone pages through an old photo album, engaging Talita and Rebecca in a conversation about her family. Next, the three sing and act out Talita’s new favorite nursery rhymes, read a children’s book the family will borrow for the week, and make plans for future activities that would interest the family while also building Talita’s language. Before Rebecca leaves for her next home-visit, she answers a few parenting questions that had been troubling Simone. Rebecca departs, leaving Simone a flier with the library’s summer programs. Like 94 percent of her peers who also entered the program lagging behind on expected developmental milestones, Talita’s rate of growth on measures of language development is likely to increase following participation in the program, which promotes increased language and reading activities between parents and child.
Turning the Page: Refocusing Massachusetts for Reading Success

Conceptualizing for Impact

Science of Reading and Language Development

| Program or Support Design | Augmenting and Influencing Adults’ & Children’s Behaviors (interactions, relationships) | Child Reading Outcomes |

makes way for sophisticated, speculative thought. So while the book may be a necessary ingredient, the key ingredient for the child is the style and technique of the intervention.27 When it works, when adult and child behaviors evolve as desired, everyday experiences in this child’s life are increasingly rich in language and text.

So what kinds of programs and services have an impact on behaviors? The most effective build two things, supportive relationships—after all, it’s hard to change behaviors without creating strong relationships—and stimulating environments. And, of course, as the behavior changes, as the child becomes interested in books and takes part in conversations about big ideas, as his language grows and reading skills develop, he will become an influencer of behaviors and relationships. This reciprocal nature of human interactions means that behavior change in one person can spark behavior change in another. For example, a child with a stronger vocabulary is easier to converse with and will inspire those around him to initiate discussions or pose questions. A child who enjoys reading will more likely ask an adult to read to him. It is understood what a vital and powerful moment it is when a child asks to be read to, but its effects run well beyond the moment because those shared reading experiences help the adult gain confidence and enthusiasm.28 They lead to subsequent shared readings and the important conversations that naturally flow from them. In turn, children’s language development gets a boost and the adult-child relationship is strengthened, too.

**ACTION STEP**

Self-Study for Impact

When assessing a program or service to decide if it substantially improves children’s language and reading outcomes, we must ask what specifically it is that is influencing and/or augmenting behaviors to improve reading and language outcomes.29

The policymakers, funders, program leaders and educators whose efforts focus on improving reading outcomes should thus recalibrate their approach. Data-driven answers to the four questions outlined below are imperative for meaningful and lasting change. Undertaking this self-study may result in reallocating resources, it may mean eliminating components of programs deemed ineffectual, or it may mean revamping the model after a couple of iterations—all in the name of maximizing resources and improving our children’s reading outcomes.30

**Key Ingredients for Impact: What’s Working?**

Many of our supports and programs are well designed and involve positive activities. And with good reason, many of our policies and funding mechanisms focus on “reach”—serving as many children and/or families as possible as well as to try and maximize return on the dollars spent. Unfortunately, we can satisfy those two priorities without effecting actual improvements in our children’s language and reading outcomes. Research nationwide, combined with our data on Massachusetts’ children—the impetus for this report—would suggest that our existing efforts are not working for a large percentage of our children. We have favored reach over impact, and in many cases, the number of clients served has become our indicator of impact instead of effects on children’s skills. In other words, we consider a program a success if it reaches lots of children and if the participating children, families, and/or providers like it, instead of measuring success by how much it influences children’s behaviors and competencies around reading and ultimately their reading outcomes.

To understand whether a program or support is working—and for whom it works and under what conditions—we must commit to ongoing evaluation, formative and summative, informal and formal.31 We don’t need large-scale evaluation on a regular basis, but we do need at least one indicator, at the child level, on the targeted outcome. Those data must then become part of an embedded routine of analysis and response, at the program level (see recommendations 2 and 3). Once key ingredients of
successful programs are identified, then possible scaling-up across different contexts makes sense. However, this necessarily requires having planned for scaling-up at the design stage. And in the realm of formal evaluation, when we do evaluate, it’s often a small pilot study involving maximum implementation, even with considerable support from the research team—conditions that we aren’t able to take to scale. Discovering what works for Massachusetts’ children at scale also requires larger samples as part of a field trial.

**Sufficient Dosage for Impact: Are We Augmenting Behaviors Enough to Make a Difference?**

Reaching the tipping point for changing behaviors so as to improve children’s reading outcomes requires a deep, sustained investment of time and effort. Yet the dosage levels, intensity and depth of services, matter—such as how much time is spent in the program, how often it happens, or the frequency of contact with participants. For many language and reading supports, these increments are too small; consider the weekly tutoring session or the periodic parent education night that never gains enough traction to influence behaviors and, in turn, make a difference to reading outcomes.32 Often, the basic elements of the program are theoretically sound, research-based, and practically feasible—they make good sense for the population and fit the context. However, the design with respect to depth and intensity is under-powered, or not sufficient to make a difference.

So we may think we need more or new programs when in fact what we may need to do is to increase the intensity and depth of our existing ones and see if that works. When we successfully solve the dosage problem, we may be left with the (good) problem of how to bring the program to scale. With a proven remedy for moving students’ reading outcomes, there should be many viable opportunities to build political will and even pool limited resources to get programs to scale. Investing in these remedies does not necessarily require an increase in spending; it involves recapturing monies we are currently spending on less effective programming, as well as on the individual and societal costs associated with reading failure.

**Implementation Characteristics for Impact: Are We Really Delivering the Program or Support?**

Quality of implementation is a major barrier to impact on children’s reading outcomes; even our model programs quickly lose their impact if not implemented correctly. Yet our research finds widespread examples of program implementation that differed greatly from the original program design, especially when taking a program to scale.33 The problems noted include issues of funding and other logistics, lack of sustained leadership, lack of sustained effort and attention to the initiative or practice, lack of adequately skilled staff, insufficient training provided, and a truncated program, whether in duration and or in the components of the program implemented. Ultimately, any one of these issues, but especially two or more in combination, make any given program very different from what was initially conceived, drifting too far from the design for impact.34 To ensure the ongoing effectiveness of large-scale programs, leaders should commit to rigorous standards, providing ongoing training and technical assistance by appropriate professionals, and to engaging in continual quality assessment, which might inform mid-course corrections (for further on this, see recommendation 3). If a program’s evaluation indicates that reading outcomes improved, then the reality of the services implemented must match the characteristics of the tested program design.

**Timing for Impact: Are We Focused on Prevention and Early Identification of Reading Difficulties?**

In the pursuit of better reading outcomes, an ounce of prevention is worth a pound of remediation. And prevention has been estimated at a mere fraction of the costs, on multiple levels. Therefore, at scale, we need to be much more focused on our children as readers before they are in grade 3. In turn, funding mechanisms for reading support programs in communities, across early education
and care settings, and even in the primary grades, should be tied to data on language and reading risk, rather than focused on responding to entrenched reading difficulties.\textsuperscript{35}

In our research across the state, we found that obtaining grant money and other funds for struggling readers is, appropriately, tied to student data. However, at scale, the only data collected and available on early reading is the third grade MCAS. Yet long before grade 3, and even before children enter preschool, they display differences in language skills—differences strongly related to later outcomes—that could serve to trigger services that would be preventive rather than remedial. We must remember that every new competency is built upon competencies that came before, and likewise, every difficulty fuels future ones. Therefore, if we want to promote the accumulation of strengths, rather than permit weaknesses, our focus should be early identification and supports. Not only are preventive approaches to early language and risk significantly more effective than are remedial services for entrenched reading difficulties, but with our youngest children, preventive approaches are really enrichment—they are good for all children. They readily match children’s developmental stages and are easily embedded into their daily settings. Furthermore, they are enjoyed rather than resented. Appropriately timed supports and programs, matched to a child’s developmental stage, necessarily require ongoing assessment data to inform our understanding of a child’s language and reading development, the subject of our next recommendation.\textsuperscript{36}

\section*{2 Programs and providers, including medical professionals, serving babies, preschoolers and school-age children should assess language and reading development, and should regularly evaluate the quality and impact of their services.}

Effective practice—whether educational or clinical—starts with comprehensive assessment. If we are to prevent reading difficulties, provide timely, successful intervention for those at-risk children, and raise the bar for reading success, ongoing assessment should be commonplace. It should guide our program designs, classroom practices, intervention goals and clinical services, including our mid-course corrections.

We recognize that a recommendation about assessments may be construed as problematic or inappropriate. There are legitimate reasons why assessing preschool children has been an unpopular idea. When assessment systems result in high-stress experiences for our children or purposeless additions to professionals’ plates, we can all be concerned. However, by neglecting to regularly evaluate our young children’s language and early reading skills, we have done more harm than good. We need to put our efforts into selecting multiple measures and interpreting their results in appropriate ways to promote student success. It is how assessments are used—and with whom and how the results are interpreted and used—that can be positive or negative, accurate or inaccurate. When used in accurate and ethical ways, assessments can be the critical difference between a child receiving the help he needs or struggling in reading.

Research shows that we can predict in early childhood who is at risk for later reading difficulties. For example, a child’s vocabulary at age 4 is predictive of grade 3 reading comprehension.\textsuperscript{37} Yet we often don’t formally identify and support a student who is struggling academically until that child has failed the third grade test. By that point, a cycle of academic failure (and its ripple effects) is entrenched. In some cases, test prep interventions are provided just prior to the third grade MCAS for students perceived as having skills that will result in just missing a passing score. In turn, these students may in fact earn scores that are slightly above the Needs Improvement range, and for accountability purposes, the school has succeeded.

Research shows that we can predict in early childhood who is at risk for later reading difficulties. For example, a

\begin{itemize}
  \item Built-in Opportunities to Focus on Children’s Language:
  \begin{itemize}
    \item A Routine Part of the Routine Physical?
    \begin{itemize}
      \item In 2008, 82.1\% of Massachusetts mothers received adequate prenatal care.
      \item In 2007, 84.7\% of the state’s children were immunized.\textsuperscript{5}
    \end{itemize}
  \end{itemize}
\end{itemize}

Nonetheless, the sources of their students’ learning struggles are by no means remedied. Such late-in-the-game practices are neither preventive nor proven to have any meaningful, long-term impact on outcomes. Without formal assessment systems, educators and families too often remain in the dark about a child’s learning needs until after MCAS scores return, and years of opportunities...
for intervention and support have been squandered. Even before preschool, infants and toddlers display language differences that could trigger prevention services towards building strong third-grade readers.\textsuperscript{18} Effective supports, interventions, and programs to promote children’s development are inextricably tied to assessment that begins from birth and carries forward into school. We need a comprehensive assessment system that is two-fold: It must focus on our children’s reading and language development while also evaluating the learning environments, settings, and supports we are providing them with on a daily basis.

It is important to note that some of our early education and care settings and schools have early literacy assessment systems in place to inform instructional change; they are to be applauded. However, this is most often a result of taking part in initiatives that have been implemented over the years, including Reading Excellence Act, Early Reading First, Reading First, Bay State Readers, John Silber Reading Grants and the state’s ongoing Early Literacy Intervention Program. Save for the Early Literacy Intervention Program, these programs have been targeted toward low-performing settings and serve only a fraction of students in the state. Reading First, for example, was implemented in 89 of our public elementary schools—only 8 percent. And in all cases, they have been grant programs, which means that the children who benefit are only those in schools that are adept at navigating the application process and successful in the competition.

Statewide, we do not have any data on children’s reading collected before grade 3. Yet results from many initiatives, including Reading First in Massachusetts, for example, reveal that improved student outcomes are related to an increased focus on assessment.\textsuperscript{39}

\textbf{ACTION STEP}

\textbf{Health care clinics and practices, and early education programs should implement initial screening and ongoing assessment of language and reading skills.}

The appropriate alternative to our current assessment practices is to implement developmentally appropriate screening and ongoing monitoring of language and reading skills from the start, with all children. While elementary schools are, indeed, one setting where assessment is vital, the earliest years in our children’s lives are a missed window of time in which assessment-driven support and intervention is needed to promote development. Several settings should, collectively, adopt proactive practices. First, all early education settings need formal assessments of language and early reading skills—assessments that provide an external benchmark of performance relative to same-aged peers across the state and/or nation, such that risks can be identified. In this way, targeted actions that focus on children’s learning needs will begin at a time when prevention of deficiencies is still an option. In addition, visits to medical professionals provide an opportunity to ensure appropriate language development. A nurse, nurse practitioner or pediatrician could implement a simple checklist of language skills as part of well-baby and annual visits. While some pediatricians and other health care providers make useful referrals for toddlers who demonstrate striking language delays, and there are protocols in place for early identification of autism, a formal protocol that supports ongoing assessment of language skills as precursors to later reading success is lacking as part of well-baby visits. Ongoing assessments

\textit{The Road to Reading, Birth to Age 4: Talking with Parents}

\textbf{Does your...}

\begin{itemize}
  \item \textbf{5-MONTH-OLD}
    \begin{itemize}
      \item turn his head toward sounds he hears?
      \item watch your face when you speak?
      \item vocalize her feelings (laugh, giggle, cry, fuss)?
      \item make noises when you talk to him?
    \end{itemize}
  \item \textbf{1-YEAR-OLD}
    \begin{itemize}
      \item attend to books or toys for several minutes?
      \item answer simple questions non-verbally?
      \item say two to three words to name a person or object?
      \item try to imitate simple words?
    \end{itemize}
  \item \textbf{2-YEAR-OLD}
    \begin{itemize}
      \item have 250-350 words he can use when he talks?
      \item point to pictures in a book?
      \item use sentences that are 3 or 4 words long?
      \item ask questions about the stories you read or things she sees?
    \end{itemize}
  \item \textbf{3-YEAR-OLD}
    \begin{itemize}
      \item have 800-1000 words she can use when she talks?
      \item play imaginary games?
      \item look through a story book and retell it?
      \item ask questions about the stories you read or things she sees?
    \end{itemize}
  \item \textbf{4-YEAR-OLD}
    \begin{itemize}
      \item hold a book right side up and turn the pages starting from the front?
      \item recognize some letters, like the ones in her name?
      \item pay attention to stories?
      \item know how to rhyme?
      \item start conversations?
    \end{itemize}
\end{itemize}
provide opportunities for vital conversations about creating language-rich learning opportunities across settings.

**ACTION STEP**

**School districts must have a PK-3 early literacy assessment system that includes language measures.**

While some schools do have early-literacy assessment systems in place, these tend to focus primarily on print-level skills (letter knowledge, the correspondence between letters and their sounds, and word reading); they generally do not include crucial language and meaning-based measures. The substance of these assessments consequently tips instructional balance, with the skills that are measured receiving priority for instructional time, planning, and professional development. In turn, students may appear to progress in reading based on the material assessed, particularly in the primary grades, only to demonstrate problems down the road because of the reading and language skills not included in the literacy battery. Most concerning, a child’s vocabulary and background knowledge more strongly predicts later reading comprehension ability. Therefore, students deemed capable in print-level skills could still face subsequent difficulties understanding text. Since successful reading depends on a multitude of abilities and factors, as described at the outset of this report, a weakness in any of these realms can lead to a breakdown in the reading process. In the absence of comprehensive assessment, these breakdowns are not visible until it is too late and our students slip through the cracks. A balanced approach to assessment informs balanced instructional practices that target the multi-faceted learning needs of our young readers; learning needs that include language and knowledge development.

**ACTION STEP**

**Programs, clinical settings, and schools should implement assessments of quality and impact on children’s development.**

Children’s development and the environments and opportunities they encounter daily are inextricably linked. Yet, the great majority of the assessment data we have focuses only on the students themselves. In this paradigm, we can become overly focused on individual children’s assessment scores—perpetuating a deficit model—without critically examining the quality of the settings and interactions those scores reflect. As program evaluation and setting-level measurement become more sophisticated, we should use these tools to gain a better understanding of the quality of the learning environments and relationships we provide for our children, and the impact on their outcomes. As a step forward, the Department of Early Education and Care is initiating a 2010 pilot of the Quality Rating and Improvement System (QRIS) to monitor and evaluate program outcomes and share information across early education settings. These results should then be tied to agendas for improvement, to advance the quality and impact of our settings and services, and ultimately, children’s development. This process must be ongoing in nature so that a cycle of setting-level assessment and informed action becomes the norm.

**ACTION STEP**

**Support the creation of a statewide database to track children’s development and their program enrollment.**

In Massachusetts, we lack a comprehensive database that will allow us to track, integrate, and share information about a child, from birth through their school years. Very often, when we do have assessment data on a child, the information often stays local; it does not necessarily travel with the child. Although laws are in place to ensure sharing of information collected as part of publicly-funded services, this applies only to a portion of the young children in the state. Equally important, our lack of consistent use of assessment tools and shared knowledge in this regard makes it difficult for practitioners and clinicians to interpret and use shared information. This is not the first call for better information on our children; others have cited the need for such a
comprehensive database, and progress has been made at the state level to put this in place. For example, in an effort to collect data on an early childhood population, the city of Springfield is currently piloting a program to assign every child with a unique identification number at birth. State-wide, once logistical obstacles, including issues of privacy and information sharing, have been worked through, and assessment of early language and reading skills using similar tools becomes standard, a comprehensive database is a potentially powerful instrument in our efforts toward promoting reading outcomes. However, to be sure that results are used ethically, multiple measures, careful interpretation, and careful discussion of the dynamic nature of development are necessary; any decision with data at its core should be made in concert with professional judgment. Ultimately, by tracking children’s development beginning in infancy and assessing the quality of our settings and programs—and having these data available in a database—we will be able to develop a sufficiently nuanced and meaningful understanding of our population and of what works—for whom and under what conditions.

It is important to conclude this section of the report by noting that gathering information on our children and the quality of our settings are necessary-but-not-sufficient steps toward promoting reading development. Using these data to inform our practice is the critical next step to build into our professionals’ knowledge base and routines, across care settings, schools and clinics, the subject of our next recommendation.

3 Redefine professional education to increase adults’ capacity to assess and support children’s language and reading development.

One’s professional success and impact depends directly upon training and continuing education. Adults in our early education and care settings, our communities and our schools have the potential to powerfully influence our children’s language and reading development. After all, knowledge is not institutionalized, and excellence resides in the individuals rather than the organization. These individuals are the key mechanisms through which services, supports, and interventions promote development and learning. However, many Massachusetts professionals are not provided with sufficient or effective training opportunities to deliver on this promise. For some, there is no training at all;42 for others, the professional education lacks sufficient intensity and relevance to gain traction in the practice setting.43 Our current professional-development paradigm favors periodic training sessions that are relatively brief, one-size-fits-all, and disconnected from daily practice. Moreover, if we are to improve all children’s language and reading skills—raising the bar and transforming the curve—adult participation must extend beyond our K-12 teachers. Professional development focused on children’s language and reading is crucial for all adults who influence children’s language and reading skills.

**When Assessments Fail to Measure Up: An Incomplete Battery**

Every fall, winter, and spring, teachers at the Rosa Parks* Elementary School would test their students’ reading levels with a two-part assessment. In part one, teachers presented each student with a list of words and tallied the percentage of words the student read accurately. Part two assessed the student’s ability to retell a story. Principal Mary Lansdowne took heart in her students’ progress on these informal reading inventories. She was convinced that their gains on the school tests would be reflected in their MCAS scores. Unfortunately, like the results in so many other educational settings, growth on the Rosa Parks School’s measures didn’t translate into improvement on the standardized assessment.

Lansdowne had minimal formal training in choosing and interpreting reading and language assessments. She was not aware that, in addition to the data from tests used at Rosa Parks, her teachers would need test data that would compare her students with students at same-grade levels across the state and the nation. Without this comparable information, it was difficult for teachers to recognize that while students were, indeed, improving in reading, they were not meeting benchmarks. Mary and her teachers didn’t realize that the vocabulary and reading instruction at Rosa Parks wasn’t targeted or rigorous enough to help their children reach the level of their Massachusetts peers.

*Representative of schools/students the research team has studied.
The following action steps focus on the ways in which we need to bolster educators’ knowledge and practice. To some extent, the critique underlying our suggested steps is meant to provide the ongoing support and training that is part of any professional service. However, it also illuminates a greater problem of inadequate teacher and administrator training and preparation in how children learn to read. Effectively supporting reading, a complex developmental process, is arguably the most essential task to ensuring children’s long-term academic and career success in the current economy. However, too many administrators and teachers, especially new teachers, are unable to translate knowledge of reading and language development to effective instruction. This, despite hundreds of thousands of dollars and countless hours devoted to training—resources representing a tremendous investment by individuals and the state in both pre-service and continuing education. In fact, it is common for our graduate students in education to openly express their lack of preparedness as a major barrier to effective teaching and a feeling of competence in the classroom. Ultimately, much training becomes retroactive and corrective, taking place after children receive instruction. While pre-service training and licensing is beyond the scope of this report, it remains an important agenda item for the Office of the Secretary of Education, which includes the Commissioner of Early Education and Care, Commissioner of Elementary and Secondary Education, and the Commissioner of Higher Education.

**ACTION STEP**

**Provide early education and care providers, paraprofessionals, and health care professionals with training focused on supporting children’s language and reading development.**

Presently, some of the adults who work most closely with our young children, and who have multiple points of contact with families of babies and young children, are those with the least formal training in how to assess and support children’s language and reading development. Our early education and care providers receive minimal opportunities to develop their instructional skills, and while there are new plans underway, family child care providers are currently largely excluded from capacity-building endeavors. Likewise, although nearly all children visit the doctor and language growth could be assessed and discussed during the appointment, community health professionals receive little or no professional education in the domains of children’s language and reading development. Missed opportunities to educate adults in the service of children’s academic success are also inherent in many of our elementary schools. Regrettably, paraprofessionals, often the very people charged with providing daily support for our students most at-risk for reading failure, are regularly left out of professional development efforts. These important individuals, who can be powerful influences in a reader’s life, should be included in professional development aimed at improving practice. As long as there is a significant divide between the person who is charged with caring for young children and the person who holds knowledge about detecting risk and cultivating reading development, efforts toward improvement will be impeded.

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**Matching Student Needs with Instruction: A Professional Learning Community at Work**

The kindergarten teachers gathered around a table in the staff lounge, each looking through the information book on weather they would share in class the next day through a read-aloud. This was their fifth grade-level team meeting devoted to vocabulary instruction since the fall, when vocabulary was identified as a crucial area of student need across the school. For this particular session, they were focused on making read-alouds more accessible to struggling students, and using the text to teach new words. Along with their teacher guides and materials, each had brought the vocabulary assessment results for a few of their struggling students.

They were working to use error patterns from the assessment to inform the way they presented the book on weather in class.

“I don’t think Martin knows the word ‘snow’” shared Ms. Vindal, referring to a student who had recently moved to the school from a warmer climate. Her paraprofessional nodded in agreement.

“Probably not,” agreed Ms. Johnson, the principal. “But I think you could convey the idea of snow pretty quickly, especially now that it is winter, and with the pictures. But what would you do when you reach the word ‘plow?’ It has so many meanings.” As a group, the teachers shared their ideas and discussed how words with multiple meanings confused students. Before they wrapped up the meeting, they talked over the words they thought were critical for the kindergartners to learn before the year was up.
Professional Development for Early Educators, Teachers and their Instructional Leaders

1. Identify children’s needs as demonstrated by patterns in data
2. Participate in training targeted to meeting children’s needs
3. Implement changes to instruction
4. Receive feedback and support from instructional leaders & colleagues

ACTION STEP

Develop administrators’ knowledge about children’s language and reading to strengthen instructional leadership

Improvements will occur at scale only when site-level leaders appreciate the complexity of reading development, correctly interpret student data on language and reading, and can translate their understanding into corresponding instructional practice. Research has shown us an important solution to the problems of improving practice and retaining teachers in early education and care settings and elementary schools: Guidance and supervision from knowledgeable administrators and school leaders should be a staple of daily professional life. These leaders must also work with incoming staff, making sure that new teachers and paraprofessionals are fully aware of programs and resources and feel supported moving forward. However, we have historically focused our professional development about language and reading on teachers. Our administrators tend to lack training in efforts directed at supporting instructional improvement; their focus is often removed from the day-to-day learning that goes on in the early education and care or primary grade classroom. Elevated student achievement is linked to instructional leadership—results improve when administrators spend significant time reviewing student data with teachers, monitoring and supporting curricular implementation, understanding instructional strategies tailored to the population at hand, and supporting problem-solving, troubleshooting, and mid-course corrections in response to patterns in student data. Increasing the time leaders spend directly supporting instruction, and creating a culture of reflection and professional expertise are key steps toward data-driven reading instruction.

ACTION STEP

Establish site-level professional development that is data-driven and continuous

Finally, to gain a valuable return we must make the necessary investment. Increasing the impact of professional development on practice requires a change in the way we approach and develop training opportunities. As it stands, traditional models of professional development actually have minimal impact on reforming practice. This means, for example, that regardless of the number of professional development points any given teacher accumulates, her instructional approaches tend not to change and her students’ opportunities to learn tend to remain static. This professional development model is often ineffective because it is conducted outside of meaningful contexts, guided by topics and approaches that often reflect educational fad. The trainings are also typically extremely short in duration (e.g., a half-day), maintain teacher isolation, and consequently lack intensity as well as authenticity. This paradigm must be turned on its head: Professional development should be embedded in day-to-day practice, guided by a study of patterns in student data, sustained over time, and fueled by teacher collaboration. One-off, external workshops and meetings may be excellent starting places or mid-point opportunities for further discussion and learning, but all professional development implemented must be tied to a larger, data-driven agenda for school improvement. For positive, lasting change, it is vital that educators receive continuous feedback as well as work collaboratively through team meetings and joint planning time.
Bring language-rich, rigorous and engaging reading curricula into early education and care settings, as well as PK-3 classrooms.

It is estimated that school-age children spend 15,000 hours of their lives in classrooms; those enrolled in an early education and care setting can log as many as 20,000 hours. This is no small amount of time. As a result, these settings shape the architecture of our children’s brains—the strength of the connections among neurons—and influence their thinking skills and academic outcomes. Therefore, at each setting’s core, there should be rigorous and interactive opportunities to build academic language and knowledge, to foster curiosity and jumpstart critical thinking, and through such opportunities, to support reading comprehension.

Across the state, those thousands of hours in structured settings are not paying off the way we would hope and expect. Many of the reading difficulties that create widespread academic problems in ensuing years could be prevented if, from early childhood through the primary grades, we prioritized and systematized more intensive language-rich learning environments. Yet, according to early literacy research, only about 10 percent of those hours are spent engaging children in genuine learning activities focused on accumulating vocabulary and knowledge. By and large, the literacy learning in our early education and primary grade classrooms focuses predominantly on foundational reading skills (letter knowledge, letter sounds, and word reading) at the expense of similarly explicit, systematic, and planned instruction focused on building meaning-based skills (comprehension, conceptual knowledge and vocabulary). Test scores are revealing on this point. Many of the Commonwealth’s third-grade readers score higher on measures of word reading ability than on measures of vocabulary and reading comprehension, yet word-reading without understanding is obviously inadequate. This is an especially pressing issue since linguistic diversity is inherent in our school populations—urban and rural, high performing and low-performing. All educators—in our early education and care settings and schools—must be equipped to support and promote language development. It is no longer feasible nor is it effective to rely strictly upon specialists, whether English-as-a-Second-Language teachers, reading specialists, or even speech pathologists to augment language development. Instead, we must take a more preventive approach and design higher quality day-to-day learning environments for children. And since some of our struggling students do not succeed after appropriate and intensive intervention, we all have to do a better job of getting it right the first time. If we are serious about doing so, we need to support our educators with good models and materials.

At scale, we cannot expect early educators and teachers to both design and deliver curricula on a daily basis. The task of designing learning environments that work to meet our statewide educational standards, particularly the standards that focus on building language skills and background knowledge, remains a critical challenge without a clear road map. For many who focus on children’s day-to-day learning, the pressing question remains, how can we support our children to truly achieve these standards?

The Word Reading-Word Knowledge Gap

This graphic represents a disconcerting trend: Many children are reading words but don’t have sufficient word knowledge to support their reading comprehension. This particular study, of children born to Spanish-speaking immigrants and enrolled in Head Start programs (2001) in one of five locations in the Northeast, shows the gap widening as the children go from preschool through middle school. The research team has identified this trend among thousands of students, including native English-speakers with poor reading comprehension.
Why Curricula?
To raise the level of daily learning and improve third grade reading outcomes we need a well-crafted and comprehensive tool. That tool is a high-quality curriculum that is both language-rich and content-rich. It is an instructional resource that creates a platform for good teaching, even as it supports the setting logistics and substance crucial for promoting early language and reading. Designed and implemented appropriately, it helps teachers meet the needs of all their learners. When implemented across classrooms and settings, a high quality, language- and content-rich curriculum also becomes a tool for institutionalizing professional knowledge and effective practices.

ACTION STEP
The state should provide ongoing guidance on curricula selection and use in early education and care settings, as well as pre-K through third-grade classrooms.
To achieve the desired goals and standards requires bold intentions—and a curriculum. There is no one curriculum that all settings must implement; different curricula will be needed to match the needs of one child population versus another.59 With that variance comes the burden of vetting and selecting. Administrators and directors selecting a curriculum for their early education and care setting, their district, or their particular program, have an abundance of choices before them. What is needed is sound evidence that a curriculum being considered will support student learning, especially the building of language skills and vocabulary. Unfortunately, the process is often compromised by sales hype, glossy images, or time constraints on the decision-makers as they sort through various options—options subject to frequent change.
To encourage the use of language-rich, rigorous and engaging reading curricula, busy decision-makers must be provided with guidance. They need reliable information from objective, third party sources who have studied the options and who regularly assess both newly published materials and changing program needs. Ongoing guidance in response to student assessment and program evaluation (see prior recommendations) as to which curricula are effective—with whom and under which conditions—would greatly assist instructional leaders as they make expensive choices on curricula. A secondary, intended consequence of state guidance would be a reduction in the number of curricula in use in the Commonwealth, and the subsequent ability to have cross-district and statewide collaboration and training, reducing fixed costs and increasing shared professional knowledge.

Characteristics of effective curricula for early education and care settings and PK-3 classrooms:60

- made up of units of study that focus on big ideas and themes, encouraging shared deep thinking and discussion;
- designed to build reading skills by engaging students with purposeful, explicit opportunities for meaning-based knowledge building (e.g., vocabulary, comprehension, conceptual knowledge) in combination with systematic and explicit code-based skill instruction (e.g., phonemic awareness, letter knowledge, phonics, print concepts, word reading);
- provides a structured, daily lesson model and supporting activities that are part of a long-term plan for teaching and learning;
- has consistent features in every unit to promote teacher use and children’s learning;

Digging Deeper: Linking Language and Learning to Big Ideas
In Chelsea’s John Silber Early Learning Center, Miss Leslie’s class is studying a unit about things that grow. It’s part of the Opening the World of Learning (OWL) curriculum, also in use and being evaluated in the Boston Public Schools. She and the children are just wrapping up a discussion about the similarities between sprouting plants on the nearby shelf and those in the book, The Ugly Vegetable. Using content-rich language, she then reminds her 4-year-olds about center time.

“If you choose to go to the science table to make compost for our worm habitat, don’t forget to add the leftover carrot sticks from the soup we cooked yesterday.”
Joseph waves his raised hand, indicating his choice. The science table is Joseph’s favorite, and Miss Leslie finds it is where he does some of his best learning. While Joseph makes his way toward the worm habitat and the other students walk to their chosen centers, Miss Leslie sits down in the writing area. Meeting with the students there, she uses questioning strategies she and her colleagues have been focused on as part of their ongoing professional development. Miss Leslie then joins Joseph and his peers who are mashing carrots, leaves, and soil together. She grabs the book on the table, Wiggling Worms at Work, and engages the students: “Hmmm. What information do we still need about worms? What other questions do we have?...”
facilitates a classroom arrangement with literacy-enriched learning centers that include a wide variety of books (e.g., fiction and expository trade books, leveled books, magazines, audio), and visuals to promote learning and teaching;

incorporates activities that promote collaborative, structured interaction, play, and inquiry among children;

includes supporting materials that provide additional review and practice of the content taught in class; these materials should address the particular needs of those struggling or at-risk, including English Language Learners, or children who need enrichment.

**ACTION STEP**

Quality of implementation should be measured and monitored at the setting level.

Once a curriculum is in use, instructional leaders and educators must be held accountable for monitoring the quality—or fidelity—of its implementation. Note that by suggesting that early education and care settings, as well as PK-3 classrooms, use language-rich reading curricula and monitor their implementation, we are not suggesting that educators be reading a script or be at the same section of a lesson at the same time as the educator next-door. It also does not exclude the possibility of adding to the curriculum to match children’s needs. However, we do mean that the learning objectives of a chosen curriculum—one that has been deemed high quality and sufficiently robust to, over time and cumulatively, meet the particular population’s needs—should be met. Our educators need support to accomplish this task.61

For that reason, this curricular recommendation follows our prior recommendation on professional development (recommendation 3). It is not enough to simply buy a curriculum that matches the learning needs of a given student population, and place the teacher’s guide in an educator’s hands. Curriculum implementation can only be done well if there is a leadership team focused on improving reading instruction. These early education and school leaders should prioritize the hours in a day to spend time in classrooms and develop a firm understanding of what teachers need to support effective language and reading instruction—they should be conducting supportive observations and facilitating conversations among staff, using the curriculum as a catalyst for professional growth and improved practice. Finally, this support should reflect the fact that high-quality curricular implementation does not happen overnight; learning to use the recommended strategies and approaches is a process in which teachers’ skills are continually built and refined.

**ACTION STEP**

Students who are not demonstrating sufficient progress must receive supplemental instruction that matches the curriculum.

Instructional chaos prevails for many of our at-risk and struggling readers—those who need the most consistency through repeated exposure to the same material in varied and engaging ways, and increased opportunities for practice. Far too often these students receive separate and isolated services. It is a pressing problem that we must fix if we are to truly support our learners. The Response-to-Intervention (RTI) model being used by districts across the state under the Individuals with Disabilities Education Act (IDEA), is a relatively recent effort to prevent and reduce reading difficulties and provides an opportunity to address this problem. RTI challenges us to provide students with increasingly intense instruction designed to match their demonstrated needs, based on assessment data. An instructional approach guided by student data provides ongoing understanding of which children demonstrate insufficient progress in language and reading development—against established, outside benchmarks—despite ample opportunities to learn as part of the daily instructional core. The idea here is that we then provide these students with a “double dose” of instruction—additional, sustained (i.e., over time), and intensive instruction that matches the daily curriculum (instructional core) by focusing on the in-class objectives with respect to content and skill, while also targeting the child’s language and reading weaknesses. This approach is necessary to ensure the child makes progress in the instructional context and maintains pace with his or her peers, as well as to prevent difficulties from becoming entrenched.
Expand and strengthen partnerships with families to focus on improving children’s language and reading.

Becoming a strong reader begins at birth. The cornerstones of reading success—language, knowledge, and curiosity—should be cultivated from infancy, and in every setting. To promote the language and reading development of our state’s young children, strong partnerships with families are not optional. Families are experts on their children; they are the people most invested in the child’s growth and development.63 And families across Massachusetts are already caring for and “teaching” their children. However, while a baby’s mother may know her child loves to look at books, she is unlikely to know the latest research on how to use that book with her young child as a tool for boosting language and learning for years to come. She may regularly ask her child questions while in the kitchen, point things out while on the bus, and tell stories at the grocery store, yet not know how some of these everyday actions can be the catalyst for her child’s later school success. Similarly, the father of a first grader may hear his child reading words on a page with proficiency and declare the mission accomplished. He may not know that the act of reading the words on the page is necessary but not sufficient for his son to be a strong reader. And the immigrant mother—who left her own country to give her child a better education and life—might mistakenly be using only her limited English in the household. She does not realize that speaking in her native language, in which she can more comfortably share ideas and have rich dialogue, can boost her child’s ability to read in any language.64 It is also very likely that none of these parents are aware that the quality of a child’s home language environment at age 3 is a strong predictor of 10th grade reading achievement.65 If we reach out to children’s caregivers and give them the information they want and need to promote their children’s reading development, ultimately both the child and society will benefit. If we rely on schools only, our approach is too narrow. If we wait for kindergarten, it is too late.

ACTION STEP
Early education and care settings and schools should link family engagement efforts to children’s language, emergent literacy, and reading.

When children’s families and educators interact and communicate regularly about children’s reading development, children from all backgrounds are more academically successful. They are more likely to attend school regularly and to graduate, and ultimately more likely to pursue higher education.66 Open and ongoing communication around reading helps parents become well-versed in the language-reading connection and understand the milestones of their child’s reading achievement. Only then can they become their child’s reading advocate.

Unfortunately, this scenario is not commonplace. For many families, interaction with their children’s learning setting is a tale of hurried drop-offs and pick-ups, a few evening social events, or an exhausting nightly ordeal focused on homework. To avoid this kind of unproductive—or even counterproductive—relationship, learning settings’ should:

- regularly provide family education on children’s language and reading, including strategies for reading with children;
- link language and reading to every social event that includes families;67
- achieve transparency in communicating with all parents (native and non-native English speakers) about their child’s reading, especially if the child is struggling;

Opening Doors: School Library Supports Family Literacy

A community reading program initiated by Mary Ken-slea, librarian at the Whittlemore Elementary School in Waltham, has brought the signature-filled book card system back to the library, creating a social buzz in the stacks and building family literacy at home.

Participants take home new “green sticker” books, in English and some in Spanish, to read together with their families, then sign the book card on the inside cover and pass it along to another student. When five families have read and signed one book’s card, the Whittlemore students from those families are recognized at a school community meeting where they pose for a picture that will be affixed to the book. The book then enters the general collection for the entire community to borrow. Read Out Loud…Pass it on!, funded by a Bookapalooza grant from the American Library Association, includes a trove of books and even promotes bilingual family literacy; parents read aloud in Spanish, children read aloud in English, and the entire community benefits.
plan home extension activities that support daytime learning and prioritize daily family conversation, family reading time, and word play to build up children’s language and knowledge of abstract concepts;

- encourage immigrant families to use their native language for increased comfort and quality of dialogue;
- encourage consistent book reading and storytelling as a healthy alternative to TV watching and other screen-time;
- where applicable, make school libraries vibrant centers for family literacy partnerships.

**ACTION STEP**

Early education and care settings and schools should assess and monitor the impact of their family engagement efforts on children's language and reading outcomes.

When it comes to family engagement and partnerships, we tend to suffer from a rhetoric-reality gap. Across the state, there are many early education and care settings and schools that organize educational events, create elaborate progress reports, post information on detailed websites, send home newsletters in backpacks, hold meetings and lectures and coffees—all to encourage children’s families and caregivers to stay informed about what is going on in the learning environment. Yet when it comes to enlisting families in the actual learning process and building a truly reciprocal relationship and partnership between the professionals and leaders in these settings and the families, there is much work to do.

Time and again, sharing information does not occur in either direction because of a barrier that we have not thought through carefully enough. This barrier may be language (if the parents’ primary language is not English), may be the kind of language we use (opaque educational jargon), may be the times and ways in which we make ourselves available, or may be an implicit, cumulative unintended message that “we are not partners.”

To truly disseminate useful information to families about how to capitalize on daily interactions with their children to boost learning, we need to think about the when, the how, and the words; we need to reach parents when they’re available, in ways that make sense to them, and with words that are transparent, respectful, and easily put into action. Ultimately, if learning outcomes are not improved, then we need to modify our approach to family engagement; we must hold ourselves accountable by critically analyzing the results of our efforts and making appropriate mid-course corrections. Suggested data to be collected as part of accountability systems:

- attendance rates at parent-teacher conferences;
- number of events with a literacy component, and family attendance;
- home reading logs to estimate family reading time;
- enrichment activities and, if assigned in the primary grades, homework, with a family literacy component.

**ACTION STEP**

Capitalize on and strengthen the role of the community library in promoting family literacy practices.

Community libraries across our state are committed to helping families make reading a joy and a habit. They are filled with hard-working librarians with a love of reading and a rich collection of books. These libraries offer language-building children's programming, read-alouds, and other engaging activities for kids. In our effort to raise strong readers in the Commonwealth and to raise awareness about opportunities to promote children’s literacy development in the everyday, beginning at birth, we cannot overlook the potential impact of the community library; they play a vital role in the community and in the life of many of our families. Through our research, we identified three ways to increase their impact on reading outcomes:

- Revisit hours of opening. We found libraries that are often closed at times when families are in full swing and focused on extracurricular activities. For example, libraries often don’t open until 9 or 10 on a Saturday. We found few libraries open on Sundays, and some even limited to the hours of 10 to 4 on weekdays.

- With the goal of meeting educational standards and enriching units of study, consider programming in partnership with early education and care settings, and also with schools. In this way, community libraries could function as an extension and a real-time resource to promote teaching and learning.

- Represent local diversity. In recent years, many of our towns have been culturally and linguistically transformed by immigration. To ensure the library remains a vital part of the community and promotes family reading, the population’s diversity should be reflected via bilingual staffing, programming, signage and materials.
ACTION STEP
Use community leaders as conduits for helping families build children’s language and reading skills.

While it is within the role of many educators and program directors, supporting children’s language learning and reading could be subtly worked into the roles of other members of our communities. The leaders of our churches, temples, and mosques (including our clergy and religious education teachers), for example, are among the many committed and hard-working community leaders who have trusting, ongoing relationships with families and often share families’ language and culture; the very kinds of relationships and connections that other organizations strive to build. In an effort to raise strong readers, we need to enlist these leaders’ help. There are small ways in which this could be done to the benefit of the community. For example: Pastors could give families complex questions to talk about after church; Sunday school teachers could lead class conversations and then facilitate home extensions to these dialogues; ministers could help struggling families navigate school processes; educators in faith-based schools could adopt practices that meaningfully enrich their students’ language and reading development. Equally as impactful, these leaders could offer their buildings, familiar community settings, as locations for increasing community literacy: parent education, adult ESL classes, family reading programs, and even targeted reading support for children. These settings, and the relationships within them, are already rich with trust, knowledge, and solidarity and they therefore present ideal opportunities to teach about and influence home literacy practices that result in strong readers.

Is Homework Helping?
A study of family conversation in California showed that student-initiated discussions were primarily about homework, the amount, type and the child’s progress, but that there were virtually no exchanges that dealt with the substance and content of the homework. These results suggest that we can’t count on homework to inspire conversation, and yet it demands a lot of student at-home time.
Spread the Word!

In our research, we found striking information gaps on multiple levels across the state:

- We spoke with families who do not know that a child’s language abilities affect their later reading abilities.
- We spoke with families of young struggling readers who haven’t been able to find affordable and accessible programs and services for their children.
- We spoke with families whose children are reaching reading milestones, but who would like to know how to help enrich their skills.
- We spoke with school personnel who were unsure of the different after-school and summer programs in their own community to promote children’s reading development.
- We spoke with families of young struggling readers who don’t know their children are below average compared to their national peers.
- We spoke with clinicians who work to prevent later learning difficulties, but the programs that employ them do not implement sufficient family outreach to increase their client-base.
- We spoke with pediatricians who felt unprepared to have a conversation about language and reading with their patients.
- We spoke with schools that have support programs available for older children and yet few sign up to attend.
- We spoke with policymakers and private funders who lack clear signposts for improving the quality of programs and services, and also lack methods for evaluating outcomes.

We spoke with educational leaders on one side of the state who don’t know what kinds of programs are offered in cities and towns nearby, or on the other side of the state.

In response to the question posed at the outset of this report—where do we go from here?—we believe it is time for us all to use and share information; if we are to improve the quality of children’s language and reading environments, it’s time for a knowledge campaign on many levels. We now must go and actually connect children and their families to knowledge, and high-quality support programs and services—some that are already in place, and others that we need to build.

As a quick start, we need to:

- Broadcast messages about building language-rich environments for growing children through accessible channels (e.g., radio, TV, social media, information booths in grocery stores) and in multiple languages.
- Call for a census to create a centralized Massachusetts directory of available supports and programs that are designed to promote children’s language and reading.
- Disseminate information about these programs and supports through families, early education and care settings, schools, and business and community leaders.

But much more specifically and importantly, there are steps that many different constituents must take. Please turn this page to find out what this might mean for you.
### Appendix: Planning for Improvement Assessment, Implementation & Ongoing Evaluation (Programs & Services)

<table>
<thead>
<tr>
<th>Key Constituents</th>
<th>Crucial Action Steps</th>
<th>Self-Assessment</th>
<th>Measurable Outcomes</th>
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<tbody>
<tr>
<td><strong>MA Legislature</strong></td>
<td>Provide a framework for state-supported language and reading programs with sufficient intensity and depth to impact change.</td>
<td>Are our intentions in line with our outcomes?</td>
<td>Demonstrated increase in language and literacy skills</td>
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<tr>
<td><strong>State Agencies</strong></td>
<td></td>
<td>Is our measure of program efficacy focused specifically on language and reading growth?</td>
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<tr>
<td><strong>EOE, DESE, EEC</strong></td>
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<tr>
<td><strong>Philanthropic foundations</strong></td>
<td>Allocate funds to be used for ongoing program impact analyses that identify the key ingredients for positive outcomes.</td>
<td>Are we allocating funds to support the ongoing analysis of program services to determine impact?</td>
<td>Percentage of funded programs that can identify the mechanisms through which their program achieves results</td>
</tr>
<tr>
<td></td>
<td>Provide funding for language and reading programs with sufficient intensity and depth to impact change.</td>
<td>Are our intentions in line with our outcomes?</td>
<td>Demonstrated increase in language and literacy skills</td>
</tr>
<tr>
<td></td>
<td>Is our measure of program efficacy focused specifically on language and reading growth?</td>
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<tr>
<td><strong>MA Legislature</strong></td>
<td>Tie resources to data that demonstrates programs and services are being implemented with fidelity to their design (Note: prerequisite for this action step is that the design was already found to be linked to positive outcomes)</td>
<td>Does the reality of the services implemented match the characteristics of the tested program design?</td>
<td>Demonstrated fidelity of implementation on measures of program quality</td>
</tr>
<tr>
<td><strong>State Agencies</strong></td>
<td>Allocate funds to be used for the prevention of reading difficulties. These funds should be tied to data on language and reading risk</td>
<td>Are we focused on prevention and early identification of reading difficulties?</td>
<td>Percentage of Massachusetts children who demonstrate risk of later reading difficulties who are connected to effective services</td>
</tr>
<tr>
<td><strong>EOE, DESE, EEC</strong></td>
<td>Provide services/supports/interventions/instruction that is implemented with sufficient intensity and depth</td>
<td>Are we influencing the behaviors of our children and/or families in a way that makes a positive difference?</td>
<td>Demonstrated increase in language and literacy skills</td>
</tr>
<tr>
<td><strong>Philanthropic foundations</strong></td>
<td>Are we focused on prevention and early identification of reading difficulties?</td>
<td>Percentage of children enrolled in the program or setting that demonstrate risk of later reading difficulties and in turn are connected to appropriate interventions</td>
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<tr>
<td><strong>Program Directors and Instructional Leaders</strong></td>
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<tr>
<td><strong>Early education &amp; care settings</strong></td>
<td>Conduct ongoing impact analyses that identify the key ingredients in your service that are connected to positive outcomes (i.e., language and reading development)</td>
<td>Do we know what makes our program/curriculum/service/intervention work?</td>
<td>Demonstrated connection between practices and outcomes</td>
</tr>
<tr>
<td><strong>PK-3 settings (public, private, parochial)</strong></td>
<td>Provide services/supports/interventions/instruction that is implemented with sufficient intensity and depth</td>
<td>Are we influencing the behaviors of our children and/or families in a way that makes a positive difference?</td>
<td></td>
</tr>
<tr>
<td><strong>Early childhood services</strong></td>
<td>Balance resources so that preventative services/supports/interventions are available for children and/or families who demonstrate risk</td>
<td>Are we influenced?</td>
<td></td>
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<tr>
<td><strong>CBOs and non-profits</strong></td>
<td>Continuously refine services through evaluation of services and impact</td>
<td>Is our organization learning from our efforts?</td>
<td>Strategy is refined through an established program evaluation process on an annual basis</td>
</tr>
</tbody>
</table>
### Appendix: Planning for Improvement Assessment, Implementation & Ongoing Evaluation (Programs & Services)

<table>
<thead>
<tr>
<th>State Agencies</th>
<th>Making it Happen</th>
<th>Program Evaluation &amp; Impact</th>
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<tbody>
<tr>
<td>- DESE, EEC, CYFS, OHS</td>
<td>In partnership with early care settings, school districts and regional organizations, identify tools for assessing language and reading development</td>
<td>Do we have a list of recommended measures of language development that can be used across early care settings? On our list, do we include measures that provide an external benchmark of performance relative to same-aged peers across the state and/or nation?</td>
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<td></td>
<td>Provide ongoing funding for early childhood assessments of children’s oral language and early literacy skills</td>
<td>Are we supporting programs’ efforts to implement appropriate measures on a continuous basis? Are we ensuring that turnaround schools are able to meet the requirements around PK-3 assessment requirements?</td>
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<td></td>
<td>Creation of a centralized, statewide database to track child development in language and reading from birth to third grade, built off of existing SASID data infrastructure and expansion plans</td>
<td>Do we have an infrastructure and reporting mechanism for programs to contribute to a centralized database?</td>
</tr>
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</table>

| Medical professionals | State partners with the Pediatrics Association to include a language development checklist as part of the well-baby and annual visits | Are measures of child language development standard protocol in well-baby and annual visits? | Percentage of well-baby and annual visits that include a language development checklist |
| - MA Board of Registration of Medicine | Ensure checklist data is stored electronically and integrated with statewide database | Are the results of the language development checklist used as a platform for a conversation about healthy language development and practices between health professionals and families? | Percentage of families with whom healthy language development is discussed, including strategies for building language at home, as part of well-baby and annual visits |
| - Massachusetts Chapter of the American Academy of Pediatrics | Ensure checklist data is accessed by early education and care programs serving children birth-school age. | | Percentage of licensed early education and care programs that report having access to checklist data and protocols for discussing with incoming families |

| Philanthropic Foundations | Develop funding criteria for programs that incorporate ongoing assessment of children’s language and literacy development, as demonstrated by a high quality assessment battery | Do we have funding criteria that specifically require programs to employ measures of language and literacy outcomes, such as vocabulary? | Criteria for assessment / measurement as part of funding process |

<p>| Program Directors &amp; Instructional Leaders | Ensure services are responsive to children’s language and reading needs, as demonstrated by a high quality assessment battery | Do we have an established assessment battery that includes screening and monitoring of language and literacy development? | Assessment battery with timetable for training (as needed), administration, and reporting |
| - Early care &amp; education settings | Do we use data to identify specific areas to intensify services and/or intervention for the group and individuals? | Reduction in the number of students with identified weaknesses in language and early reading | Increase in the vocabulary levels of children |
| - PK-3 settings (public, private, parochial) | Do we use data to drive strategic decisions about our organization: selection of staff PD, materials adoption, and staff feedback/evaluation? | Scheduled times to review and act on data as an organization |
| - Early childhood services | Are the results of assessment measures used as a platform for a conversation about language and reading development and practices between educators and families? | Percentage of families with whom language and reading development are discussed, including strategies for building language and reading at home |
| - CBOs &amp; non-profits Classroom-based educators and support staff | | | |</p>
<table>
<thead>
<tr>
<th>Professional Education</th>
<th>State Agencies - EOE, DESE, EEC, DHE Executive Office of Labor and Workforce Management</th>
<th>Outline clear standards with rigorous expectations for promoting children's language development as part of pre-service preparation programs education and as part of the professional licensure process. These standards should be for teachers, instructional leaders/administrators, and early care providers.</th>
<th>Are degree programs setting explicit standards for coursework and demonstrated knowledge of language development? Are there explicit standards for language development included in licensing standards? QRI Standards?</th>
<th>Percentage of degree granting programs that meet this standard. Percentage of providers meeting licensing standards with all staff.</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>Establish quality standards for Professional Development Points (PDPs) and ongoing education efforts.</td>
<td>Do our current PDP requirements promote continuous training embedded in day-to-day practice at schools?</td>
<td>Do our PDP requirements support a coherent, school-wide strategy for promoting language and reading?</td>
<td>Percentage of PDP programs that provide ongoing inquiry into practice.</td>
</tr>
<tr>
<td>Program Directors &amp; Instructional Leaders - Early care &amp; education settings - PK-3 settings (public, private, parochial) - Early Childhood Services</td>
<td>Establish clear and shared practices for developing children’s language and reading skills</td>
<td>Do program leaders have an understanding of effective practices for promoting language and reading?</td>
<td>Do we spend sufficient time supporting language learning and reading development: observing, guiding, and problem solving with early educators and teachers?</td>
<td>Percentage of leaders with training in language and reading development. Percentage of time spent in classrooms and providing feedback.</td>
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<tr>
<td></td>
<td>Deliver relevant professional development that includes all staff</td>
<td>Do we include all staff, including paraprofessionals, in professional development?</td>
<td>Deliver relevant professional development that is targeted to staff needs that are evident by looking at student data</td>
<td>Percentage of staff in training focused on supporting children’s language and reading development.</td>
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<tr>
<td></td>
<td>Deliver relevant professional development that is ongoing</td>
<td>Are our professional development endeavors thematically connected and building off of prior learning?</td>
<td></td>
<td>Percentage of professional development opportunities that are connected to a larger, ongoing site-level goal.</td>
</tr>
<tr>
<td>Curriculum</td>
<td>State Agencies - EOE, DESE, EEC</td>
<td>Provide strong, ongoing guidance on curricula selection for implementation in all early care and education, and PK-3 settings</td>
<td>Do we have established criteria, reflecting current evidence, for what constitutes excellent curriculum (e.g., theme-based, anchored in content knowledge, and balanced with code-based skills instruction)?</td>
<td>Percentage of early education and care settings and elementary schools using curricula with these attributes.</td>
</tr>
<tr>
<td>Philanthropic Organizations</td>
<td>Tie funding and supports to specific activities shown to improve the language and reading outcomes of children</td>
<td>Are the programs we fund using curricula to structure learning activities?</td>
<td>Percentage of funded programs that use curricula to promote children’s language and reading.</td>
<td></td>
</tr>
<tr>
<td>Program Directors &amp; Instructional Leaders - Early care &amp; education settings - PK-3 settings - Early Childhood Services</td>
<td>Provide all children rich instruction in language and reading development</td>
<td>Are we using materials to provide coherent, high-quality learning experiences for children across classrooms? Are children provided with structured, systematic opportunities to build language, content knowledge, and reading skills throughout the day?</td>
<td>Demonstrated gains in language and reading. An overarching structure for what children will learn: units of study, big ideas, lessons that fit together over time.</td>
<td>Demonstrated fidelity of implementation. Demonstrated gains in language and reading.</td>
</tr>
<tr>
<td></td>
<td>Monitor and measure fidelity of curriculum implementation</td>
<td>Are educators implementing the curriculum (only modifying according to student needs)? Does the curriculum match the students' needs?</td>
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<tr>
<td></td>
<td>Provide children who are not demonstrating sufficient progress with supplemental instruction that is additive to, and aligned with, the curriculum</td>
<td>Are children with demonstrated risks receiving additional instruction targeted to their needs? Is this additional instruction aligned with the child’s classroom learning?</td>
<td></td>
<td>Children whose needs are not met by core instruction are identified every 2-3 months and provided with support. A match between instructional interventions, children’s needs, and classroom learning.</td>
</tr>
</tbody>
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### Appendix: Planning for Improvement Assessment, Implementation & Ongoing Evaluation (Programs & Services)

<table>
<thead>
<tr>
<th>Partnerships with Families</th>
<th>Making it Happen</th>
<th>Program Evaluation &amp; Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Philanthropic Foundations</td>
<td>Invest in programs that have a strong literacy-based family engagement component, and/or responds to family perspectives around language development</td>
<td>Is family engagement a component of funding criteria? Percentage of portfolio that has a clear family engagement strategy, either through direct services or through family inputs and/or referrals to related services</td>
</tr>
<tr>
<td>Program Directors &amp; Instructional Leaders - Early care &amp; education settings - PK-3 settings (public, private, parochial) - Early Childhood Services - CBOs and non-profits Educators - Early care providers - Pre-school teachers - Elementary school teachers - Paraprofessionals - School specialists</td>
<td>Link family engagement efforts to children’s language and reading</td>
<td>Do we regularly provide specific, relevant activities that families can engage in at home to promote child language and reading? Are we facilitating parents’ interactions with one another around sharing strategies for their children? On the occasions when homework is assigned in the primary grades, are we intentional about making certain that the work is a valuable use of family time (e.g., promotes conversation, builds knowledge through reading)? Increased family knowledge about building language and reading skills in the home Parent reports of talking with other parents about children’s language and reading Increased time spent reading together based on home reading logs Enrichment activities that have a family literacy component Number of events with a literacy component Gains in student achievement associated with family engagement initiatives</td>
</tr>
<tr>
<td>Community libraries</td>
<td>Proactively engage members of your community in ways that promote family literacy practices</td>
<td>Do we communicate regularly with all families about their children’s reading and language development in ways that are honest, respectful, and useful? More parents asking about their children’s achievement, accessing supports, and incorporating language building and reading opportunities into the every-day</td>
</tr>
<tr>
<td>Faith-based settings</td>
<td>Include guidance and support around language and reading development as part of your strategy for promoting children’s and families’ well-being</td>
<td>Do we support children’s language and reading growth? Increase in families asking about how to promote their children’s learning Increased use of space and resources to promote family literacy practices</td>
</tr>
</tbody>
</table>

Appendix:
Turning the Page: Refocusing Massachusetts for Reading Success


Box Endnotes

A. Statistics compiled using most recent information available from the Massachusetts Department of Elementary and Secondary Education (http://www.doe.mass.edu/) and the Massachusetts Department of Early Education and Care (www.mass.gov/eed).


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Building language over lunch: Capitalizing on small moments with small kids

A couple sat at a table in a restaurant eating lunch, while a buzzing bee repeatedly flew into the closed window next to them. From the next table a small boy came toddling over. He extended a sticky finger, pointed, and said: “Look! A fly!”

It’s a seemingly casual moment, but one worth pausing at. How the adults around this toddler respond will either build his language or keep his vocabulary and knowledge base where it is. This is not to propose that lunch be constantly disrupted by long conversations that are dictated by the child’s needs at all costs—for either table of patrons—only that the small moments filled with extra bits of language can make a difference for the child’s language growth and knowledge base in the long run.

Option A: The couple sitting at the table explains the insect is a bee, not a fly. They ask the child if he were ever stung by a bee and talk about the importance of bees for pollinating flowers. The mother, from the adjacent table, adds that the bee is doing his best to get out of the restaurant and return to the hive and the flowers, and then asks the boy how he thinks the bee got inside.

Option B: The adult couple says hello to the little boy and smiles sweetly at him. The mother says to the boy, “No, it’s not a fly, it’s a bee. Why don’t you come back and sit down and eat your lunch?”

Different adults in the same scenario will take different approaches. Neither response is right or wrong in every instance, but if representative of a general pattern of adult-child interactions, the reactions will shape how the child will respond when, as a kindergartner, he hears his teacher read a book about bees. With more understanding of bees, there is more learned from the next bee experience. To build on knowledge and encourage curiosity for more knowledge, we need to feed our children with ideas and words and elaborative language, all along the way.

Intensive early support beyond the school day: A promising design

The halls of the Healey School in Somerville are still busy long after classes officially let out for the day, and large groups of younger students are a critical mass. Almost one quarter of the kindergarten, first-, and second-grade students stay after school for ACE It! classes, a four-day-a-week K-8 program with literacy at its core. Teacher-taught ACE It! classes are extensions of the curricular content studied in class and are designed in an active and engaging way to give extra help where it’s needed. In addition, young students who have not met the state standards or mastered grade-level literacy material by year’s end are offered a free, 5-week, 46-hour summer school program also taught by the Healey teachers and linked to the school curriculum.

“We have a basic assumption that you front-load services for at-risk kids before, during, and after the school day to prevent failure now rather than remediate later. Going to classes [after school and in the summer] does not have the same negative impact at this early age—enrichment and remediation feel the same,” explains Principal Mike Sabin.

Playing with Words: Early Educator training on language acquisition

It is free-play time at the Malden Early Education and Learning Program, and preschool teacher Doreen Anzalone and several children are sitting on the floor, playing with blocks and pushing toy cars. “Do you think we should all build a garage? When cars are broken, they need a place to go to be fixed,” Anzalone explains. “Matthew’s car has a broken tire. If we build a garage, he could bring his car over. Matthew would be so happy if he had a place to go to fix the tire.”

Anzalone’s tone is warm and gentle, reflective of the personality traits that drew her to early education and care in 1986, a few years after she graduated from high school. In a simple, playful interchange Anzalone was helping children develop the vocabulary and oral language skills that are the building blocks of literacy. Her words reflect what she learned about language acquisition in young children while studying for the BA degree from UMass/Boston that she earned in 2009. She returned to school with support from the Building Careers and Early Childhood Educators Scholarship programs and from a director who provides staff with the flexibility they need to attend classes.

“My education helps me bring play into the classroom, and children learn best through play,” Anzalone says. “It was very hard to go back to school and to balance my home life, working full-time, school, but I saw that there was a light at the end of the tunnel. I knew it was going to make me a better teacher in the classroom, and that’s really what I was striving for.”
A Developing Reader’s Journey to Third Grade

A reader’s typical milestones

Understands several simple phrases.
- Has 1 or more words.
- Repeats common rhymes.
- Imitates speech e.g., “na-na, ga-ga.”
- Enjoys lift-the-flap books.

Has 800-1000 words.
- Comfortably uses long sentences.
- Begins to rhyme and play with words.

Has 3000-5000 words.
- Starts to match letters with sounds.
- Uses complex and compound sentences.

Starts to read words automatically. Expands knowledge by listening to and reading books.

Reads chapter books. Is now learning an estimated 3,000 words a year.

6 months
- Talk, talk, talk!
- Read books with faces, animals, objects.
- Have “conversations” while pushing the stroller.
- Read interactive books.

1 yrs.
- Read and recite nursery rhymes.
- Go to the library to find books together.
- Point to pictures and words as you read.
- Play rhyming games.

2 yrs.
- Read fiction and nonfiction books.
- Visit museums & libraries.
- Call attention to letters on signs. Talk about letter sounds (“Mom & milk both have “mmm” sound at the beginning.”)

3 yrs.
- Focus on a few new words while you read. Repeat them in other situations.
- Have fiction and nonfiction books & magazines available.
- Limit screen time to encourage reading.
- Have fun with rhyming games.

4 yrs.
- Starts to read words on the page.
- Makes predictions while reading using knowledge, pictures, & text.
- Have fun with rhyming games.
- Help your child develop an independent reading routine before bed.

5 yrs.
- Call attention to letters on signs. Talk about letter sounds (“Mom & milk both have “mmm” sound at the beginning.”)
- Have fiction and nonfiction books & magazines available.
- Visit museums & libraries.
- LImit screen time to encourage reading.

6 yrs.
- Have fiction and nonfiction books & magazines available.
- Visit museums & libraries.
- Encourage the reading & rereading of easy books.

7 yrs.
- Have fiction and nonfiction books & magazines available.
- Visit museums & libraries.
- Encourage the reading & rereading of easy books.

8–9 yrs.
- Have fiction and nonfiction books & magazines available.
- Visit museums & libraries.
- Encourage the reading & rereading of easy books.

Ways adults can support children’s language and reading

Develop a habit of talking and reading from birth to build up children’s knowledge. Sing songs and play games. Elaborate on what they say to increase their language, then tell your own stories—about what happened on the bus, what you saw on the news, what you heard on the radio—and encourage them to tell theirs. Make reading a routine. Babies enjoy being held and talked to while looking at simple picture books. Toddlers like to look at pictures while lifting flaps and feeling textures and hearing rhymes. Children age 4-9 enjoy longer stories and repeated reading of favorite stories and nonfiction books.

Make a point of reading chapter books out loud—listening is tough work for kids at first, but easier with practice; it is valuable for children’s language growth to hear great stories that are beyond their reading ability. It is also great fun for caregivers and children alike to read together.

Compiled in consultation with existing research.