

Appropriate definition and assessment of school readiness are important policy and practice issues that lie at the intersection of the education and public health sectors. Furthermore, today's economic pressures demand that all students graduate from high-school "college and career ready," a goal best addressed by focusing first on early childhood. In order to prevent the achievement gap, a significant barrier to college and career readiness, states are increasingly measuring and monitoring children's learning and development upon kindergarten entry. Adding urgency to these policy goals, the federal Race to the Top – Early Learning Challenge competition requires states to submit detailed plans for promoting school readiness as part of their application for these federal funds (due October 19, 2011). In the spring of 2011, Ashaunta Tumblin, M.D., an M.P.H. student at the Harvard School of Public Health, researched the status of school readiness in Massachusetts and other states and developed policy recommendations for Strategies for Children.

Research Project Goals

1. An understanding and summary of school readiness definitions in other states.
2. An understanding and summary of state-level school readiness policy in Massachusetts.
3. Documentation of district-level school readiness assessment systems in Massachusetts.
4. Research into the potential role of the pediatric community in supporting school readiness.

National and State Context

According to a 2010 report by the National Conference of State Legislatures, 25 states require assessment of kindergarten readiness.¹ The domains covered by these assessments vary by state, but all include one or more of the five domains (health and physical development, emotional and social competence, communication skills, approaches to learning) identified by the National Education Goals Panel in its landmark 1995 report.² Nearly all 25 states assess universally, as opposed to assessing only a sample of kindergarteners, but the purpose and usage of these assessments varies from mandatory annual reporting (20 states) to guiding curriculum and instruction decisions (18 states) to communicating with parents (4 states).³ Maryland has been assessing school readiness of entering kindergarteners for more than a decade and has placed school readiness and early education within a larger statewide education reform strategy. Maryland currently assesses seven domains and shares results with parents, teachers, and policymakers. Rhode Island is moving toward implementation of one standard statewide readiness assessment. The state has an innovative and robust public health data system called KidsNet that could potentially house future school readiness data and lead to greater alignment between the education and health sectors.

The 2005 enabling statute of the Massachusetts Board and Department of Early Education and Care (EEC) charges the board with overseeing "the development and management of an educationally sound kindergarten readiness assessment for pre-school children." This mandate was expanded in the 2008 Act Relative to Early Education and Care, which states that such assessments shall be developmentally appropriate, aligned with program quality and curriculum standards, and shall not be used for high-stakes decisions about a child's transition to kindergarten. Kindergarten readiness assessment is one component of a comprehensive system for measuring program performance and effectiveness, with the goal to "maximize every child's capacity and opportunity to enter kindergarten ready to learn."⁴

Why "readiness" matters:

School readiness and educational attainment correlate strongly with health and economic outcomes and disparities.

The achievement gap starts early. Disparities in children's cognitive, social, behavioral, and health outcomes have been demonstrated as early as 9 months, widening by 24 months of age.

Consistent statewide school readiness assessment and reporting have documented a narrowing of the school readiness gap over time.

Fiscella, K., & Kitzman, H. (2009). Disparities in academic achievement and health: The intersection of child education and health policy. *Pediatrics*, 123(3), 1073-1080; Halle, T., Forry, N., Hair, E., Perper, K., Wandner, L., Wessel, J., & Vick, J. (2009). Disparities in Early Learning and Development: Lessons from the Early Childhood Longitudinal Study – Birth Cohort (ECLS-B). Washington, DC: Child Trends; Maryland State Department of Education. (2011). Getting Ready: The 2010-2011 Maryland School Readiness Report.

Massachusetts School Readiness Timeline

- 2001:** Governor's Commission on school readiness in MA
- 2004:** National School Readiness Indicators Meeting
- 2005:** Dept. of Early Education & Care (EEC) established, charged with assessing kindergarten readiness
- 2007:** Universal Pre-kindergarten pilot program launched
- 2008:** Universal Pre-kindergarten program requires use of one of four assessment tools
- 2011:** Quality Rating and Improvement System launched; EEC and NYU plan assessment pilot in Springfield

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Although there is currently no statewide school readiness assessment in Massachusetts, the commonwealth has made significant progress in this area since 2005. EEC has gradually promulgated the use of developmentally appropriate assessments through the state's Universal Pre-Kindergarten program and other initiatives and, in partnership with the Department of Elementary and Secondary Education (DESE), is currently conducting pilot programs and developing policy with the input of key stakeholders in the early education and care field.

Research Methods

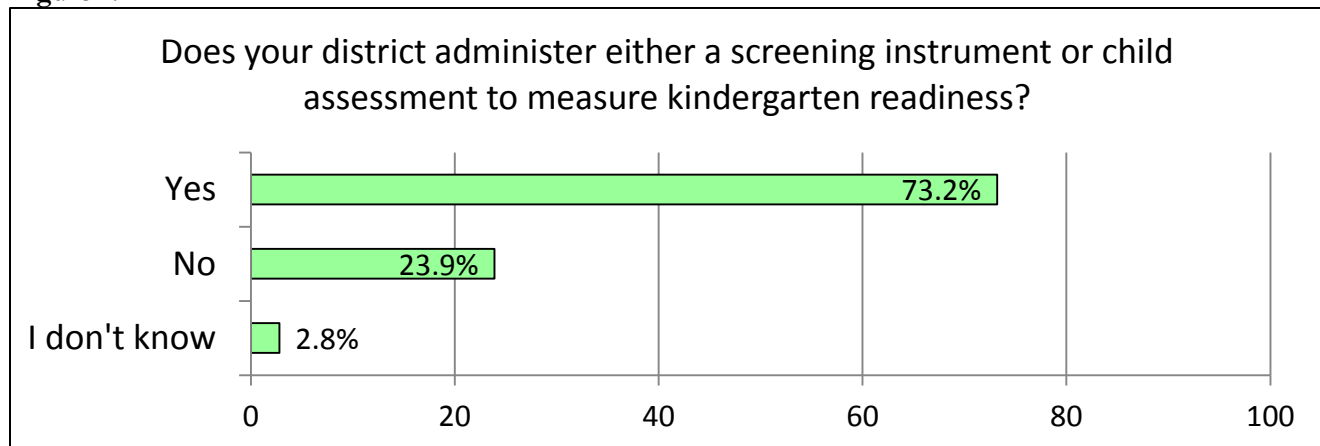
Multiple methods were used to gather data for this study. Interviews were conducted with 30 national-, state-, and district-level educators, policymakers and pediatricians knowledgeable about school readiness. Interview responses were used to help inform a focus group protocol and electronic survey of kindergarten readiness assessment practices. The survey was completed by 66 of the total 164 grantees (40% response rate) of the Massachusetts Department of Elementary and Secondary Education's Full-Day Kindergarten (FDK) grant program. Fifty-six FDK grantees (34% participation rate) participated in the focus group via a webinar. Key findings revealed the following:

What is happening in Massachusetts' local school districts?

- **Nearly three-quarters of survey respondents use a school readiness assessment or developmental screening instrument in their district (Figure 1).**

Almost three-quarters (73.2%) of respondents report the use of a kindergarten readiness tool, which is encouraged, but not required by the Full-Day Kindergarten grant that all respondents' districts receive. However, there is tremendous variety in the tools that are used. ESI and DIBELS and DIAL are the three most commonly used tools, respondents report. . Additional tools include Ages and Stages Questionnaire, DRA, GRADE, Tools of the Mind, Work Sampling System, Brigance and locally developed assessments created by teachers and districts. This finding confirmed anecdotal evidence that, despite the lack of one standard statewide kindergarten readiness assessment tool, most districts assess kindergarten children in the manner that each deems appropriate.

Figure 1.



- **Only 25% of survey respondents indicated that their districts have a definition of school readiness.** These definitions included levels of child development, achievement of specific skill sets, reaching the district-defined age for kindergarten, and the readiness of families, schools and communities to promote learning.
- **As measures of school readiness, children's social and emotional skills are highly valued by state and local leaders, yet assessment tools currently used do not emphasize measurement of these domains.** The school district survey revealed that social and emotional development and/or skills are the top priority for local practitioners, but are not commonly measured by local assessments (Table 1). Interviewees expressed strong support for the inclusion of appropriate social and emotional skills, such as self-regulation and executive functioning, in the definition

of school readiness. These domains are typically given special focus in the school readiness literature and are measured by more than half of the 25 states currently assessing readiness.⁵

Table 1.

Survey Question	Top Survey Responses		
	1 st	2 nd	3 rd
Domains assessed by current tools*	Motor (88%)	Literacy (82%)	Math (73%)
Importance of measured domains (<i>high or very high importance</i>)	Social/Emotional (97%)	Literacy (75%)	Math (61%)
Statewide tool should measure	Social/Emotional (96%)	Literacy (81%)	Math (78%) Motor (78%)

* 57% of respondents indicated their current tools assess social/emotional.

- **Educators perceive many benefits to a statewide school readiness assessment, primarily that it would put “everyone on the same page.”**

Collecting data in a standardized way in districts across the state would give the education and medical communities access to common definitions and expectations, while supporting anecdotes of successful child outcomes with hard evidence. It would also provide for a more comprehensive assessment of outcomes than some districts are currently conducting. School districts would have less difficulty transitioning children who arrive from other districts with different assessment practices. A statewide assessment would also give government leaders a longitudinal view with which to evaluate the impact of education policies. Given fiscal constraints, this could help the state identify areas of weakness and judiciously allocate resources. Lastly, there is general agreement that to help get everyone “on the same page,” the state should set a standard cut-off birthdate for kindergarten entry, a decision currently made at the local level.

- **Educators and administrators require reassurance, support and training on the priorities of statewide school readiness assessment.**

One of the main challenges to a implementing a statewide system of school readiness assessment is the training of educators in both community-based settings and public schools. Educators must be adequately trained to conduct assessments and interpret results. There must be adequate funding and support to meet any new mandates about assessment.. Results of assessments must be interpreted in a timely fashion so educators can use the information to inform instruction.. There must be clear guidelines about how the data is to be used by parents, educators and policymakers. Identifying the optimal assessment tool, which covers all developmental domains and is low-cost, quick and easy to administer, will require careful deliberation. Finally, parents must be assured that the assessment would not be used to exclude their children from kindergarten.

- **There are questions about the term “school readiness.”**

Informants offered different opinions about when school readiness begins (i.e. preschool, prenatally pre-conception), and stressed the continuous nature of child development. The word “readiness” prompts a “yes” or “no” answer that inappropriately dichotomizes a continuous phenomenon. Both pediatricians and early childhood experts made the observation that this term is highly problematic and inconsistent with the science of child development. In addition, informants felt that schools should be “ready” to help all children succeed, regardless of what an assessment shows about their development upon kindergarten entry. In fact, when asked if their district uses any metrics for measuring the readiness of the school or classroom, survey respondents listed environmental rating tools (i.e. ECERS, CLASS, ELLCO) and national standards such as NAEYC accreditation. Shifting to a broader conception of readiness would take the onus off of the child and shift to a shared responsibility to ensure that family, community and school all play their parts to achieve optimal child development. This type of definition is consistent with the one drafted in Massachusetts in 2001 by the Governor’s Commission on School Readiness.⁶

How should pediatricians support school readiness and collaborate with educators?

- **Pediatricians should play a larger role in assessment.**

Various stakeholders agreed that pediatricians are uniquely positioned to assess school readiness because they establish long-term relationships with families that involve frequent visits in children's early years. Currently, pediatricians reach virtually every family with young children in Massachusetts, including those without access to formal early education and care programs. Across the country, school districts often require a health form for registration, completed by a pediatric provider. In Massachusetts, pediatricians are already required to perform behavioral screens of MassHealth patients, from birth to age 21, using an evidence-based instrument (due to a court ruling, *Rosie D. vs. Patrick*, involving delayed detection of behavioral problems).⁷ Interviewees generally agreed that developmental screens as specified by the American Academy of Pediatrics at 9-, 18-, and 24- or 30-months would be beneficial.⁸ There was support for extending the 4-year-old well child visit by 30 or 45 minutes to focus on school readiness.

- **In general, educators and pediatricians felt increased communication between health care professionals and schools would be mutually beneficial.**

Educators especially valued information on health concerns relevant to school readiness, developmental problems attention and impulsivity problems, and social and emotional issues. They felt it was not helpful to receive prescriptions for multiple hours of services outside of the individualized education program. This reinforced the recommendation that pediatricians be better informed about the processes schools undergo to meet the learning needs of students. If pediatricians were to conduct developmental and school readiness assessments, this information would then need to be transferred to educators. Educators would like to know about diagnoses that affect school readiness and families' level of engagement with health care providers. Data from developmental, hearing, vision and/or lead screens would be helpful to schools. A potential vehicle for communication is the use of a pediatrician-generated form detailing the health history that the parent can bring to school administrators. However, this introduces the risk of data entry error. Many support the development of a common assessment tool that feeds into a common data system. Collaborations between pediatricians and educators should begin around problems like attention deficit hyperactivity disorder. Here, there is motivation on both sides to communicate about school readiness.

- **Privacy concerns must be addressed.**

In creating a dialogue among pediatricians, teachers and schools on school readiness, there were several privacy concerns. Sharing of information must comply with both HIPPA (Health Insurance Portability and Accountability Act) and FERPA (Family Educational Rights and Privacy Act) so that parents control the level of disclosure. Current practices of giving parents the option to sign a release of information form were considered to be one way to legally share data. A potential state consent form was also suggested. Information technology with the appropriate privacy protections in place was considered another method of increasing communication between doctors and teachers.

- **Pediatricians face several hurdles to engaging in this work.**

Many pediatricians surveyed reported that they do not feel properly trained to effectively conduct developmental assessments and are uncomfortable dealing with mental health, social and emotional problems. It must be clear to pediatricians what services are available in the community to meet these needs. A clear commitment to promoting school readiness is required from the pediatric field with respect to training and practice. The lack of reimbursement for the additional time screening requires only further reduces incentives. As is the case for educators, pediatricians face considerable time constraints in the typical 15-minute well child visit.

“School readiness is the extent to which the mutually supportive family, school, and larger community are prepared to promote a child’s learning by optimizing social, emotional, cognitive, and motor skills as well as physical and mental health.”
- Definition proposed by the researcher

Policy Recommendations

Federal government:

- Annually publish data on all 50 states' readiness definitions and assessment practices.
- Provide incentives, requirements and supports for assessment and information technology in major federal programs and legislation (i.e. Early Learning Challenge, Elementary and Secondary Education Act, Affordable Care Act).

- Provide Medicaid reimbursement for screenings at 9-, 18-, and 24- months of age, as well as the 4-year-old school readiness well-child visit.

Massachusetts Legislature and governor:

- Increase state investments in early education and care, to increase access, affordability, and quality.
- Specify and phase-in a statewide kindergarten entry date.
- Ensure state-funded health care reimbursements for assessments and screens.

EEC and DESE:

- Craft a consensus definition of school readiness by 2012 that reflects the importance of social and emotional development as well as cognitive and academic skills.
- Continue the slow and steady scale-up of statewide school readiness assessment system.

Other inter-agency collaborations:

- Enhance EEC and Department of Public Health (DPH) collaboration around Early Intervention services and pilot of DPH-run Early Development Inventory, a school readiness assessment tool that uses geocoding to guide resource allocation.
- DPH should draft and propose regulatory changes to pilot assessment by pediatricians that is aligned with EEC, DESE, and American Academy of Pediatrics (AAP) standards.

Policy Update: Early Learning Challenge

Since the completion of this study, the federal government has launched the Race to the Top - Early Learning Challenge. “The purpose of the Early Learning Challenge is to improve the quality of early learning and development and close the achievement gap for children with high needs.”⁹ Funded by Congress in the fiscal year 2011 budget, the \$500 million competition will reward states that create comprehensive plans to transform early learning systems with better coordination, clearer learning standards and meaningful early childhood workforce development. Massachusetts is eligible for up to \$50 million and is one of 36 states, plus the District of Columbia, that have submitted letters of intent to apply for this competitive grant.

Federal policymakers clearly understand the rationale and urgency behind school readiness assessment, and this initiative reflects the commitment of the Obama Administration to make sure all children enter kindergarten ready to succeed. Furthermore, the application places a high premium on understanding the status of children’s development at kindergarten entry, a competitive preference priority in the application. The criteria specifically call for a credible plan to administer a valid, reliable and appropriate kindergarten entry assessment to public school children beginning in 2014, that the assessment be aligned with state early learning standards, and that assessment results be reported to the Statewide Longitudinal Data System and early learning data system.¹⁰

The findings of this study should inform the work of EEC and DESE as they continue to develop and pilot kindergarten readiness assessments, apply for federal funding such as the Early Learning Challenge, and foster the assessment, data and analytic capacities of the early childhood field.

About the Researcher:

Dr. Ashaunta Tumblin was a recipient of the Commonwealth Fund/Harvard University Fellowship in Minority Health Policy at the Harvard School of Public Health. Dr. Tumblin’s research interests include preventing health and educational disparities between advantaged and disadvantaged population subgroups by ensuring that all children enter school ready to succeed. Dr. Tumblin graduated from the Harvard School of Public Health in May 2011 with an M.P.H. concentrated in family and community health. She graduated cum laude from Harvard Medical School in 2007. She was a research fellow of the National Institutes of Health in 2005–06 and a Schweitzer Fellow at the Hospital of Dr. Albert Schweitzer in Lambaréné, Gabon, during the summer of 2006. Most recently, Dr. Tumblin was named a Robert Wood Johnson Foundation Clinical Scholar, and has been conducting research in Los Angeles since July 2011.

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¹ Stedron, J. M., & Berger, A. (2010). NCSL technical report: State approaches to school readiness assessment. National Conference of State Legislatures. Retrieved from <http://www.ncsl.org/documents/Educ/KindergartenAssessment.pdf>

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³ Ibid.

⁴ Massachusetts Session Law. An Act Establishing a Department of Early Education and Care. Chapter 205 of the Acts of 2004.; Massachusetts General Law. Part I. Title II. Chapter 15D. Section 12., retrieved from <http://www.malegislature.gov/Laws/GeneralLaws/PartI/TitleII/Chapter15D/Section12>

⁵ Ibid.

⁶ Wieworka, A., & Washington, V. (2001). School readiness in Massachusetts: A report of the governor's commission on school readiness.

⁷ Litigation overview. (2008). , 2011, from <http://www.rosied.org/Default.aspx?pageId=89308>

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⁹ U.S. Department of Education, & U.S. Department of Health and Human Services. (2011). Race to the Top – Early Learning Challenge. Executive Summary. Retrieved from <http://www2.ed.gov/programs/racetothetop-earlylearningchallenge/exec-summm.pdf>

¹⁰ Ibid.