

# getting reAdy



## The 2010-2011 Maryland School Readiness Report

### the early years: a window for learning

The years from birth to age five are the most crucial period of learning in a child's life. This is the "window" in which a child's greatest brain development takes place. In fact, nearly 90% of a child's brain development – in response to the stimulation the child receives – happens by age five. Early experiences lay the groundwork for a child's lifelong learning and behavior.

That is why school readiness – a child's ability to successfully carry out kindergarten work – depends so heavily on a child's birth-to-five learning experiences. It is also why, as experts point out and as Maryland's 2010-2011 school readiness data affirm, children's early learning affects their school success well beyond kindergarten. The data show, for instance, that as kindergarten school readiness results improve, third-grade reading and math scores rise correspondingly. A child's readiness to start kindergarten is the most important educational milestone in his or her life.

### more than worth the investment

The school readiness of Maryland's children has a powerful impact not only on the quality of future adults' lives but also on our economy itself. Nobel-Prize-winning economist James J. Heckman's research shows that effective early care and education decreases the need for Special Education and remediation, and also reduces juvenile delinquency, teen pregnancy, and dropout rates.<sup>1</sup> Similarly, a Pew Center study by economist Mark Cohen and criminologists Alex Piquero and Wesley Jennings finds that the societal "pay now" price of supporting healthy prenatal care, sound parental skills, and quality PreK programs are a fraction of the "pay later" price associated with the problems of low birth weight babies, child abuse and neglect, and high school dropouts.<sup>2</sup>

### the MMSR: how Maryland assesses school readiness

To assure that we have an accurate understanding each year of the level of school readiness of every child entering kindergarten in Maryland, the Maryland State Department of Education developed the Maryland Model for School Readiness (MMSR), a kindergarten assessment<sup>3</sup> that evaluates what each child knows and is able to do in the seven Domains of Learning: Language and Literacy, Mathematical Thinking, Scientific Thinking, Social Studies, the Arts, Physical Development, and Social and Personal Development.

<sup>1</sup>James Warren, "Economist's Plan to Improve Schools Begins Before Kindergarten," *New York Times*, December 23, 2010. <sup>2</sup>Pew Center On the States, Issue Brief, "Paying Later: The High Costs of Failing to Invest in Young Children," January 2011. <sup>3</sup>The MMSR kindergarten assessment uses a modified Work Sampling System (WSS)<sup>™</sup> as its assessment instrument.



Every year, kindergarten teachers use the MMSR to individually assess the readiness of each of their students in the seven essential areas of learning. Teachers are trained by the Maryland State Department of Education to effectively use the MMSR. The MMSR is not a “test,” but a set of systematic, carefully-defined daily observations, work samples, and age-appropriate guidelines by which a teacher assesses the skills of each entering kindergartener. The MMSR identifies three levels of school readiness:

- **Fully Ready:** The student consistently demonstrates the skills, behaviors, and abilities needed to meet kindergarten expectations.
- **Approaching Readiness:** The student inconsistently demonstrates the skills, behaviors, and abilities needed to meet kindergarten expectations successfully, and requires targeted instructional support in specific areas.
- **Developing Readiness:** The student does not demonstrate the skills, behaviors, and abilities needed to meet kindergarten expectations successfully, and requires considerable instructional support in several areas.

### using the MMSR

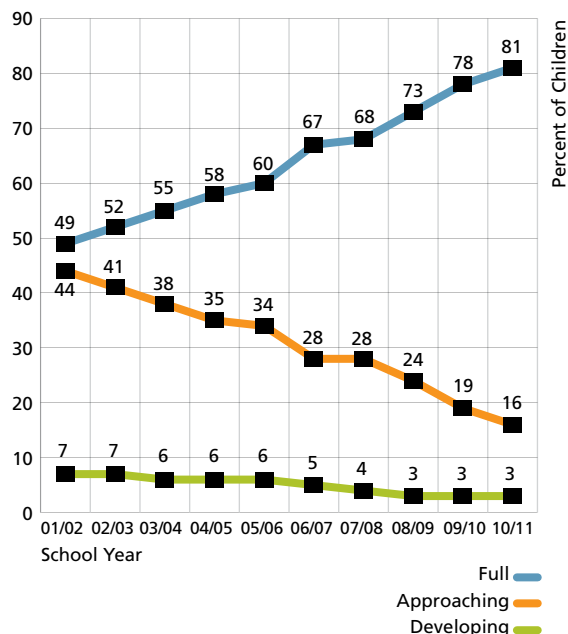
The MMSR is not just a tool to assess children’s skills and abilities. Kindergarten teachers use the findings to inform classroom instruction, provide appropriate support for individual students, and promote better communication with parents about children’s abilities. Local school systems use the findings to guide professional development opportunities for teachers, inform strategic planning, target resources, and successfully help children make the transition from early childhood to school.

The compiled statewide and jurisdictional school readiness data released annually by the Maryland State Department of Education provide an invaluable source of information and insight for early educators, schools, legislators, public libraries, business leaders, and other community leaders for continuing to strengthen the school readiness of Maryland’s young children.

### Domains of Learning

- **Language and Literacy** - Talking, listening, speaking clearly, understanding stories, knowing some letters
- **Mathematical Thinking** - Counting, sorting, copying patterns, knowing some numbers and shapes
- **Physical Development** - Running, jumping, climbing, drawing, zipping, buttoning, using scissors
- **Scientific Thinking** - Exploring, asking questions, and using the five senses to get information
- **Social and Personal Development** - Getting along with others, following routines, finishing activities
- **Social Studies** - Following rules, knowing about the different jobs that people do, talking about how people are alike and different
- **The Arts** - Dancing, singing, making music, playing “make believe,” drawing, painting

### School Readiness Data



#### Population Data, MD Dept of Planning, 2009

Children < 5 (age 0-4) 376,440

#### School Enrollment MSDE, School Year 2010-2011

Kindergarten Students 62,701

##### Kindergarten Ethnicity

- American Indian 0.4%
- Asian 6.1%
- African American 33.1%
- Native Hawaiian/Pacific Islander 0.3%
- White 41.8%
- Hispanic 14.4%
- Two or More Races 4.0%

##### Kindergarteners by Subgroup

- Children with Disabilities 8.2%
- English Language Learners 14.0%
- Free/Reduced Priced Meals 42.3%

##### PreK Students 29,377

- Full-Day Program 42.9%
- Half-Day Program 57.1%

### we continue to make strong progress

More than 62,700 children entered Maryland’s kindergarten classrooms this year, a 12% growth in enrollment since 2001-2002. With ever-increasing enrollment and a rapidly diversifying population, Maryland continues to meet statistical school readiness improvement projections.

In 2010-2011, 81% of kindergarteners were fully school-ready, up from 49% in 2001-2002 and 78% last year. This latest rise in readiness represents a 65% growth (a 32-point increase) for Maryland in the past decade: extraordinary progress since 2001-2002.

The widespread increases in school readiness throughout Maryland’s jurisdictions affirm our success to date. In fact, all of Maryland’s 24 jurisdictions showed growth from 2001-2002. Eighteen jurisdictions reported higher school readiness from 2009-2010 and 17 jurisdictions exceeded the statewide average.

Our continued progress and strong success contributed to Maryland ranking #1 in the nation for the third year in a row. *Education Week* placed Maryland on the top of its list in 2010-2011, citing the state’s long-term commitment to PreK – 12 education, curriculum alignment, state accountability, high standards, teacher effectiveness, and work in school readiness.

### achievement on the rise for all children

Several kindergarten subgroups have consistently had significantly lower school readiness than Maryland kindergarteners as a whole and are considered at risk of not being as successful in school as their peers.

The 2010-2011 data show that levels of school readiness are substantially improving for children entering kindergarten with risk factors:

- 76% of African-American children are fully school-ready, up from 37% in 2001-2002 and 71% in 2009-2010.
- 70% of Hispanic children are fully school-ready—a 31-point readiness gain from 2001-2002 and 4 points more than last year.
- 73% of kindergarteners from low-income households (as indicated by Free and Reduced Price Meal status) rose to full readiness, up from 34% in 2001-2002 and 69% in 2009-2010.
- 68% of English Language Learners (ELL – children whose first language is not English) are fully ready, up from 35% in 2001-2002 and 65% in 2009-2010.
- 56% of children with disabilities are fully ready, making a substantial 26-point gain from 2001-2002 and 5 points more than last year.

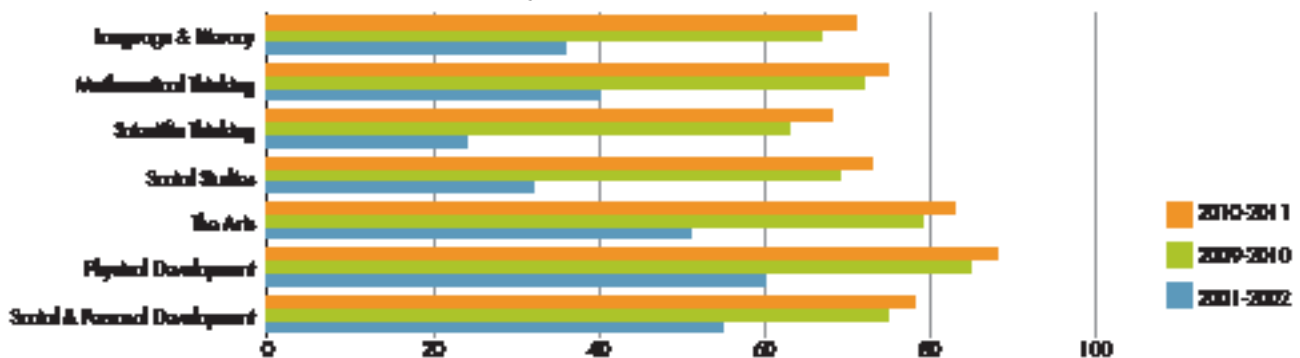
## substantial gains in school readiness

The 2010-2011 MMSR data show sizeable school readiness gains across all Domains of Learning. The statewide focus on Language & Literacy and STEM (Science, Technology, Engineering, and Mathematics) subjects resulted in tremendous progress in these areas. There were statistically significant increases since 2001-2002 of 35 points for Language and Literacy, 35 points for Mathematical Thinking, and 44 points for Scientific Thinking. Moreover, Language and Literacy readiness has the highest correlation to increases in overall full readiness levels.

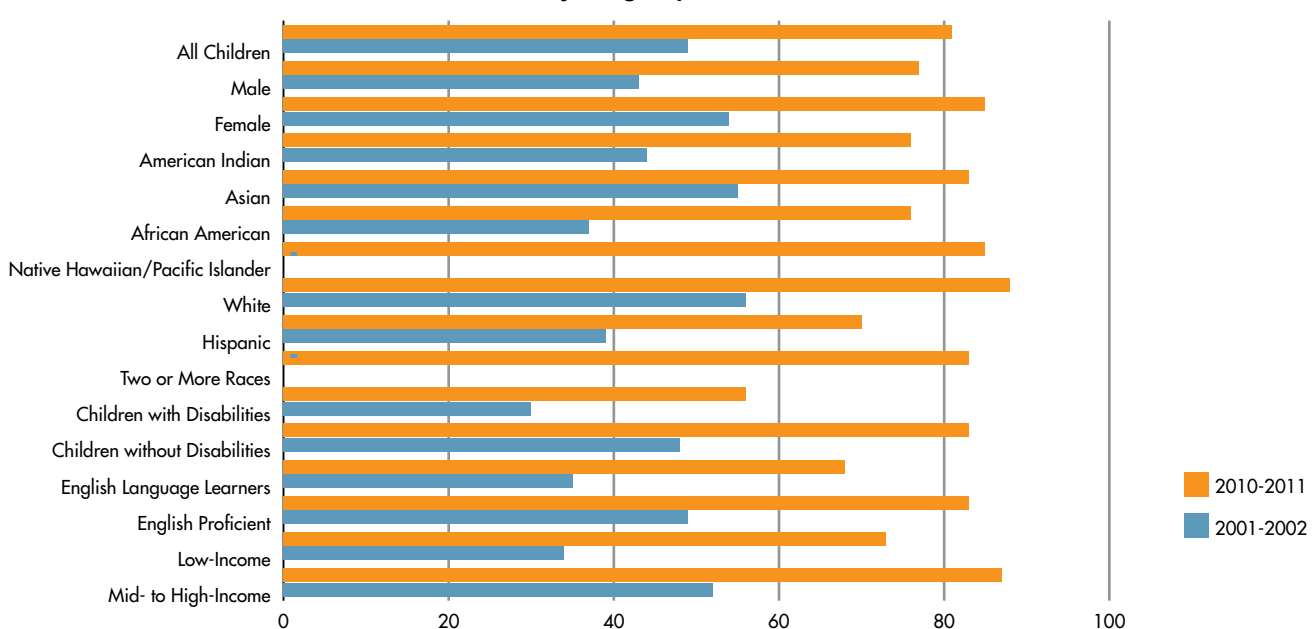


The improvements take on even greater significance now that the MMSR data show a strong link between kindergarten readiness and Grade 3 reading and math scores on the Maryland School Assessment (MSA). Children who enter kindergarten fully school-ready are 8 times more likely to be proficient in both reading and math by third grade. The data also show that of the jurisdictions ranking in the top quartile for 2010 on the Grade 3 MSA in Reading (advanced or proficient), 67% exhibited greater Language & Literacy school readiness than the statewide average for school year 2006-2007 (the year the third graders entered kindergarten).

Full School Readiness by Domain



Full School Readiness by Subgroup



## Prior Care and Attendance Make a Difference

The 2010-2011 MMSR data show that formal prior care (attending an early learning program one year prior to kindergarten, such as child care, Head Start, PreK, or non-public nursery school) impacts children's school readiness. In 2010-2011, 79% of kindergarteners attended a formal early learning setting the year prior to starting school, with approximately 43% or 26,150 children attending public PreK programs in 2009-2010.<sup>4</sup>

### According to the MMSR

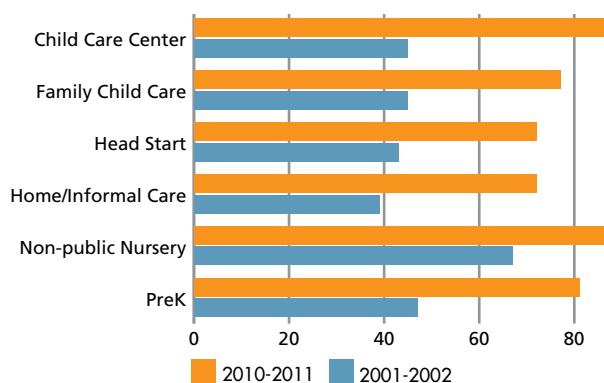
- Maryland's young children showed school readiness gains across all prior care settings.
- There were significant gains among children who were enrolled in Head Start Centers (up 29 points from 2001-2002 to 72% fully ready in 2010-2011).
- Children attending non-public nursery programs (92% fully ready for 2010-2011), child care centers (87% fully ready), public PreK programs (81% fully ready), and family child care (77% fully ready) experienced high readiness levels.
- Children attending public PreK programs were consistently better-prepared for school (81% fully ready for 2010-2011) than those in home or informal care (72% fully ready).

The amount of time a child spends per day in early learning, as well as the consistency of attendance, are also highly correlated with school readiness. A recent study by the Annie E. Casey Foundation links chronic absenteeism with an increased likelihood of poor academic performance, disengagement from school, and behavioral problems.<sup>5</sup> The National Center for Children in Poverty reports that chronic absenteeism among kindergarteners is associated with substantially lower academic performance, especially among Hispanic/Latino children.<sup>6</sup> A Montgomery County Public Schools report connects full-day PreK with increased kindergarten literacy skills.<sup>7</sup>

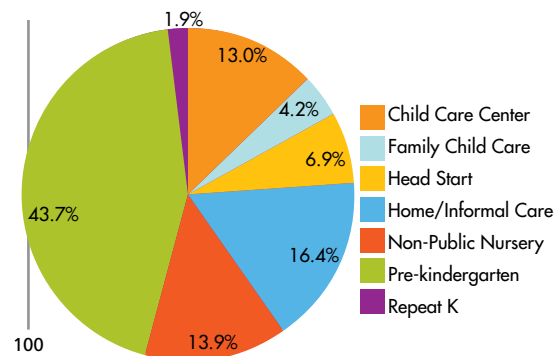
In Maryland:

- 42.9% of Maryland's PreK children are in full-day programs, receiving, on average, three more hours of instruction per day than children in half-day programs.
- Jurisdictions that offer full-day programs to 100% of PreK students rank in the top quartile for school readiness, as well as for readiness of children from low-income households.
- Jurisdictions that serve the greatest percentage of 4-year-olds (more than 75%) through the public PreK program exhibited higher school readiness than the statewide average.
- There is a 95.3% attendance rate statewide for elementary school children, with 6.2% of students chronically absent (more than 20 days of the 180-day school year).
- Jurisdictions with the fewest chronically absent elementary school children have the highest percentage of kindergarteners who are fully school-ready.

Full School Readiness by Prior Care



Prior Care Enrollment,\* School Year 2009-2010





## collaborative systems raise school readiness

The data demonstrate that creating a streamlined birth-to-kindergarten continuum of support for young children measurably improves school readiness. Early childhood expert Dr. Sharon Lynn Kagan, Co-Director, National Center for Children and Families, Columbia University (keynoter at Ready At Five's December 2010 School Readiness Symposium) calls this a "system of services." Maryland has the necessary elements in place for such a collaborative system, including Head Start; public PreK; accredited early childhood services; credentialed early care and education professionals; and new statewide PreK curricula.

A case in point is the Judith P. Hoyer Early Child Care and Education Enhancement Program (Judy Centers), a network of 25 centers administered by the Maryland State Department of Education in 22 counties. Judy Center partnerships collaborate with child care centers, Head Start, family support centers, resource and referral agencies, early childhood programs serving children with disabilities, parents, and businesses to provide wide-ranging services for at-risk children, birth through 5, and their families. Judy Centers use the MMSR to assess school readiness outcomes.

As a result of their collaborative efforts, Judy Center partnerships, with a significantly larger proportion of children with school readiness risk factors (67% of Judy Center children receive Free and Reduced Priced Meals, are English Language Learners and/or have disabilities, compared with 45% statewide), are able to achieve higher levels of school readiness among attendees. A recent report, *An Analysis of Influence of Judy Center Services on the Maryland Model for School Readiness Kindergarten Assessment Outcomes*, highlights the impact of collaborative systems on school readiness:<sup>8</sup>

- Children who had Judy Center experiences in the year prior to kindergarten have higher readiness levels (71% fully ready) than those who did not have such experiences (63% fully ready), performing better in all seven Domains of Learning.
- Of the children with significant risk factors (Free and Reduced Priced Meals, English Language Learners, and/or children with disabilities), those with prior Judy Center experience had higher school readiness scores (67% fully school-ready, compared with 64% statewide).

The strengths of the Judy Center partnership model, as substantiated by the data, are in providing and coordinating support for children's early learning on multiple fronts, which creates broad efficacy and accountability. Such an approach, in Maryland's vibrant environment of services and advocacy for young children, carries vast potential.

<sup>4</sup>Figure reflects public PreK enrollment for school year 2009-10 (i.e., the year prior to enrollment in kindergarten in school year 2010-2011).

<sup>5</sup>Sarah D. Sparks, "Districts Begin Looking Harder at Absenteeism," *Education Week*, October 6, 2010.

<sup>6</sup>Mariajosé Romero and Young-Sun Lee, "A National Portrait of Chronic Absenteeism in the Early Grades," National Center for Children in Poverty, October 2007.

<sup>7</sup>Laura Bornfreund, "Better Literacy Skills Linked to a Full Day of Pre-K," Early Education Initiative, New America Foundation, May 23, 2010.

<sup>8</sup>Maryland State Department of Education, "An Analysis of Influence of Judy Center Services on the Maryland Model for School Readiness Kindergarten Assessment Outcomes," January 2011. The report uses MMSR 2008-2009 school year data.

<sup>9</sup>National Institute for Early Education Research (NIEER), "The State of Preschool—2008," 2008.

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