

# Ready or Not, Here They Come An Issue Brief on School Readiness in the Virgin Islands

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Scientific and educational research suggests that the foundation for success in life begins during pregnancy and is built through age five. In fact, the brain is the only organ that is not fully formed at birth, so during the first three years of life, trillions of connections between brain cells are being made. Children's earliest experiences and environments set the stage for future development, critically influencing this brain development and the neural connections that provide the foundation for language, reasoning, problem solving, social skills, behavior, and emotional health.<sup>1</sup> While some differences in developmental pace are to be expected, disparities in early development associated with socio-demographic factors are indicated to have a profound effect throughout the lifespan.<sup>2</sup>

*Critical development occurs before children enter the formal education system at kindergarten.*

*Pregnancy and the earliest years of life represent the best opportunities to positively impact the trajectory of a child's life.*

As early as kindergarten, a significant achievement gap is evident between low-income children and their more affluent peers.<sup>3</sup> More specifically, research indicates that children from low-income families are more likely to start school with limited language skills, health problems, and social and emotional problems that interfere with learning. Indeed, average cognitive scores of the most affluent children have been observed to be as much as 60% higher than those of the poorest children before they enter kindergarten.<sup>4</sup> Moreover, low-income children are more likely to go on to attend lower-quality schools, often widening rather than closing these gaps.

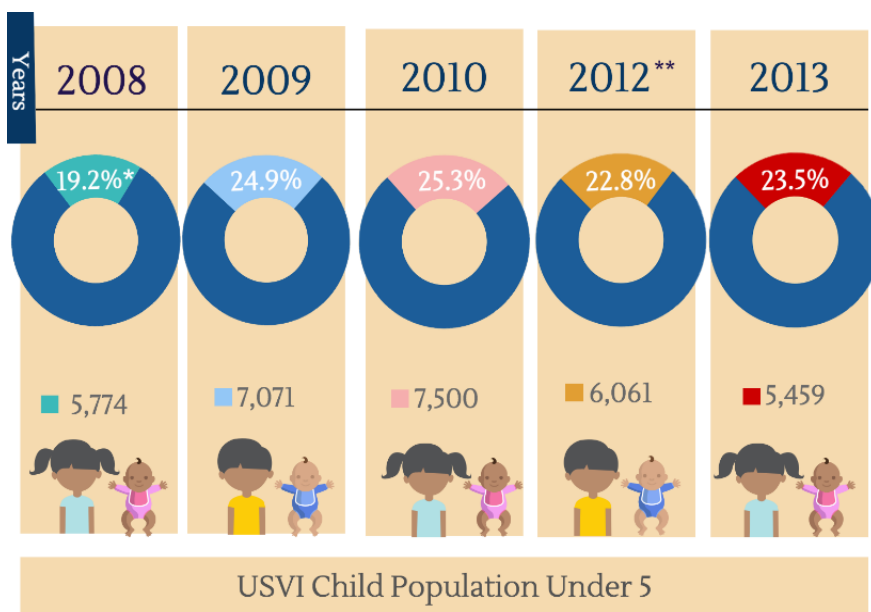
Children who enter school with age-appropriate foundational skills are subsequently more likely than "unready" peers to experience later academic success, attain higher levels of education, and secure employment.<sup>5</sup> When a young child enters kindergarten ready for school, there is an 82% chance that he or she will master basic skills by age 11. In comparison, there is a 45% chance of mastery for children who are not school ready.<sup>6</sup> Deficiencies in such early skills are likely to contribute to even greater disparities going forward.

Yet, despite consensus around the critical importance of early childhood for outcomes throughout the lifespan, our youngest population group often lacks priority positioning vis a vis policy and program decision-making. In order to improve long-term academic outcomes, increased attention must be paid to supporting and assessing school readiness and identifying successful, evidence-based programs to address the myriad factors that can ensure a fair start for all children at school entrance.

## What is School Readiness?

Defining school readiness is complicated by the fact that the concept of "school readiness" comprises multiple components and is shaped by numerous factors. There is consensus, however, that a child's readiness for school is best conceptualized and addressed across five dimensions, which interact with and reinforce each other:<sup>7</sup>

- **Physical Well-Being and Motor Development** - Conditions before, at, and after birth; health status and growth; physical abilities, such as gross and fine motor skills
- **Social and Emotional Development** - Social development (ability to interact with others and their capacity for self-regulation), and emotional development (perceptions of self, abilities to understand the feelings of others, and ability to interpret and express own feelings)
- **Approaches to Learning** - Inclination to use skills and knowledge, including enthusiasm, curiosity, and persistence on tasks
- **Language Development** - Communication (listening, speaking, and vocabulary) and emergent literacy (print awareness, story sense, early writing, and the connection of letters to sounds)
- **Cognition and General Knowledge** - Thinking and problem-solving as well as knowledge about particular objects and the way the world works (includes mathematical knowledge, abstract thought, and imagination)



\*All percents calculated out of the total population ages 0-19.  
\*\*Data for 2011 are not available from the data source (Virgin Islands Community Survey).

Situating these dimensions within an ecological systems frame, a comprehensive understanding of school readiness must take into account not only children’s skills and behaviors, but also the environments in which they are developed. As such, early childhood leaders at the state and national level agree that efforts to improve school readiness must also address the capacities of families, schools, and communities to provide developmental opportunities for young children.<sup>8</sup>

Drawing upon this conceptualization, the 3-year, 17-state *National School Readiness Indicators Initiative* proposed the “Ready Child Equation” to describe the range of components that influence children’s readiness for school:<sup>9</sup>

- **Ready Families:** Child’s family context and home environment
- **Ready Communities:** Community resources and supports available to families with young children
- **Ready Services:** Availability, quality, affordability of programs that influence child development and school readiness
- **Ready Schools:** Critical elements of schools that influence child development and school success

Given the complexity of defining and conceptualizing school readiness, identifying data to capture and track this subject requires the use of more than a single data point. The National School Readiness Indicators Initiative identified core and emerging indicators to measure and track progress towards achieving school readiness and improving the lives of infants and young children.

**Ready Children**

- Physical Well-being and Motor Development
- Social and Emotional Development
- Approaches to Learning
- Language Development
- Cognition and General Knowledge
- Assessment of Early Skills and Behaviors

**Ready Families**

- Mother’s Education Level
- Births to Teens
- Child Abuse & Neglect
- Children in Foster Care
- Family Reading to Young Children
- Maternal Depression

**Ready Communities**

- Young Children in Poverty
- Supports for Families with Infants and Toddlers
- Lead Poisoning
- Housing
- Homeless Children
- Neighborhood Conditions

**Ready Services - Health**

- Health Insurance Coverage
- Low Birthweight Infants
- Access to Prenatal Care
- Immunizations
- Well-child Visits
- Developmental Screening and Assessment

**Ready Services – Early Care and Education**

- Children Enrolled in an Early Education Program
- Early Education Teacher Credentials
- Accredited Child Care
- Accredited Family Child Care Homes
- Access to Child Care Subsidies
- High-Quality Child Care and Early Education Programs
- Parent Involvement in Early Care and Education Programs

**Ready Schools**

- Class Size
- 4<sup>th</sup> Grade Reading Scores
- Transition Practices between Pre-school and School
- Special Education and Early Intervention

**What Factors Impact School Readiness?**

Readiness for school can be adversely affected by various risk factors, including families’ poverty status, parents’ educational levels, neighborhood/living conditions, and children’s health and living environments.<sup>10</sup> Children from low-income families are particularly vulnerable to starting school with limited language skills, health problems, and social and emotional problems that interfere with learning.<sup>11</sup> Early literacy and language development have received increased attention in recent years, with research suggesting that the messages conveyed to and the words learned by infants differ across socio-economic groups. In one well-known study, children from high-income families were found to be exposed to 30 million more words than children from families on welfare during their first three years of life.<sup>12</sup>

In helping children get prepared for school, families and communities are paramount. Indeed, children raised in families that are economically secure and have healthy relationships are more likely to succeed in school.<sup>13</sup> Parents and other caregivers foster school readiness by surrounding infants and young children with love and support and facilitating opportunities to learn and explore their world. Communities foster school readiness by providing social support for parents, learning opportunities for children, and services for families in need. Schools foster readiness by maintaining connections with local child care providers and preschools, enacting policies that ensure smooth transitions to kindergarten, and being prepared to address the diverse needs of the children and families.

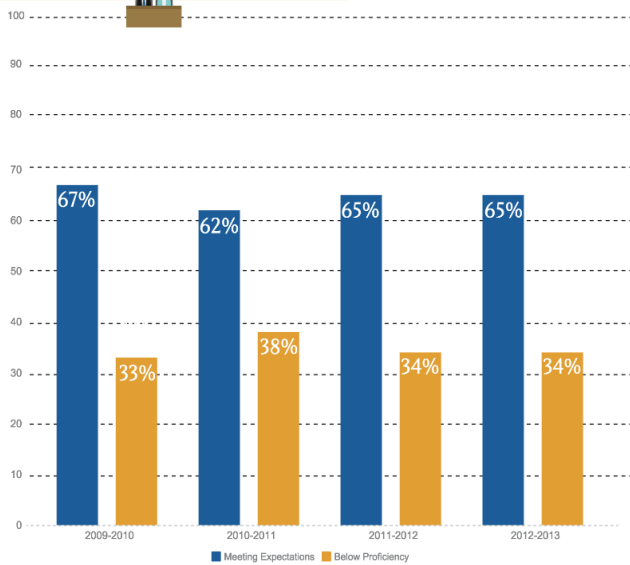
*Since 2000, CFVI has been at the forefront of gathering and tracking data through its involvement in the national **KIDS COUNT** initiative. The annual **KIDS COUNT USVI Data Book** provides local statistics on child well-being in the U.S. Virgin Islands, with the purpose of promoting dialogue on children’s issues and stimulating community response to improve the health, safety, and economic status of VI children. Partnerships with local data providers allow CFVI to function as a storehouse for indicators essential to assessing and tracking child and family well-being.*

*CFVI is also a member of the **Campaign for Grade-Level Reading**, a national collaborative effort by foundations, nonprofit partners, business leaders, government agencies, states, and communities to increase the number of children from low-income families reading proficiently at the end of 3rd grade, thereby improving their likelihood of succeeding in school and graduating prepared for college, a career, and active citizenship.*

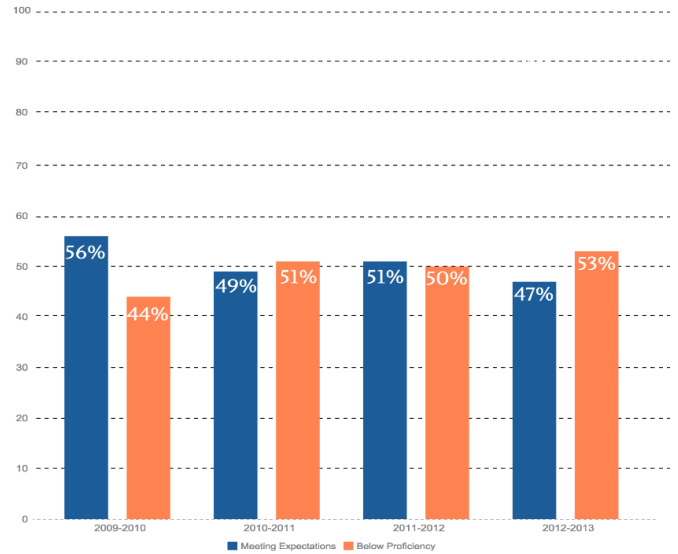
## Are VI Children Ready to Enter Kindergarten?

Measurable indicators enable policymakers, program managers, and others to track progress on the issues that matter. Given that the primary aim of this issue brief is to provide a conceptual overview of school readiness, the most relevant indicator is assessment of skills and behavior for young children entering kindergarten. Data available from the Virgin Islands Department of Education include results from annual screenings of public school kindergarteners using the Learning Accomplishment Profile, 3rd Edition (LAP-3). The LAP-3 assesses a hierarchy of developmental skills in a sequence of seven domains: Gross Motor, Fine Motor, Pre-writing, Cognitive, Language, Self-help, and Personal/Social.

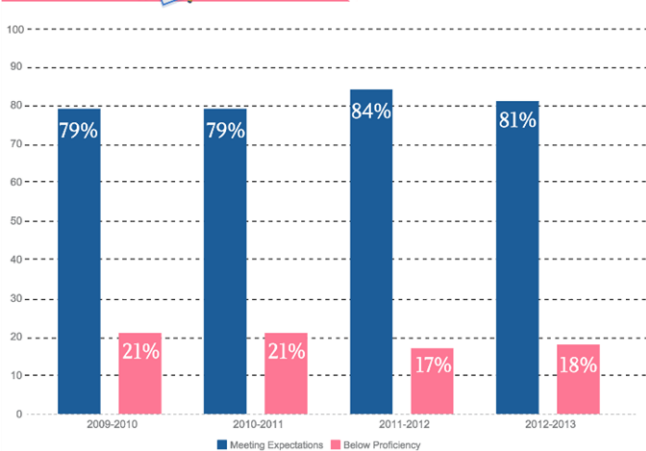
### Cognitive



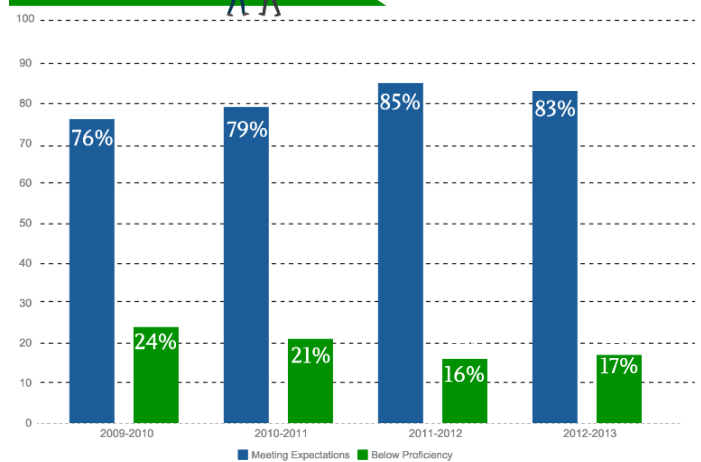
### Language



### Pre-Writing



### Personal/Social

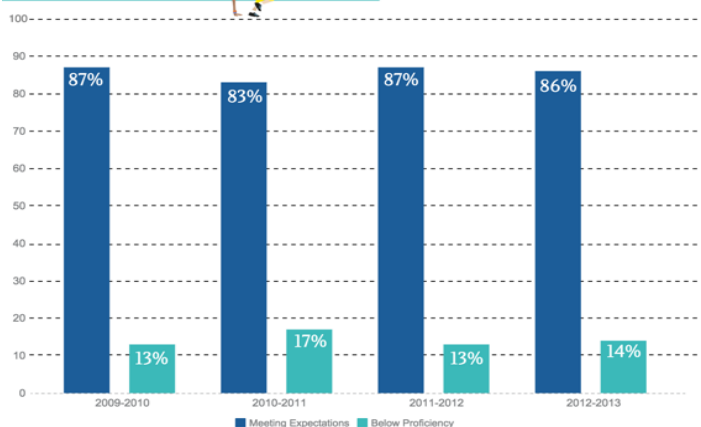


According to data reviewed for a 4-year period (school years 2009-10 through 2012-2013), roughly a quarter or more of Virgin Islands public school kindergarteners are below age-level expectations in 4 of the seven assessed domains.

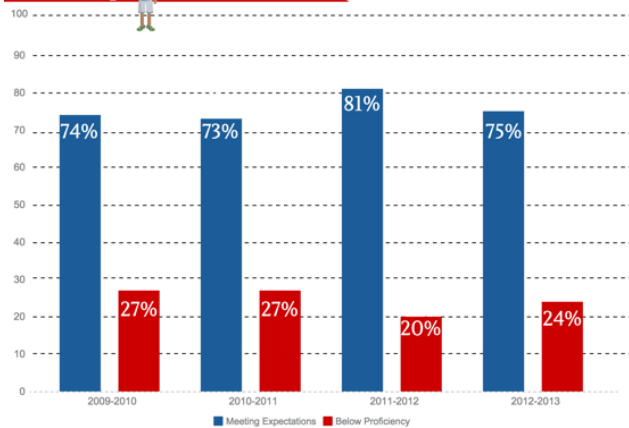
The percent of children below age-level expectations in the Cognitive and Language domains is notably higher, with a 4-year average of 35% of children with assessment scores below proficiency in the Cognitive domain, and 50% below proficiency in the Language domain.

On the other hand, Gross Motor is an area of relative strength for the sample, with a 4-year average of 86% of students meeting expectations (including proficient and advanced).

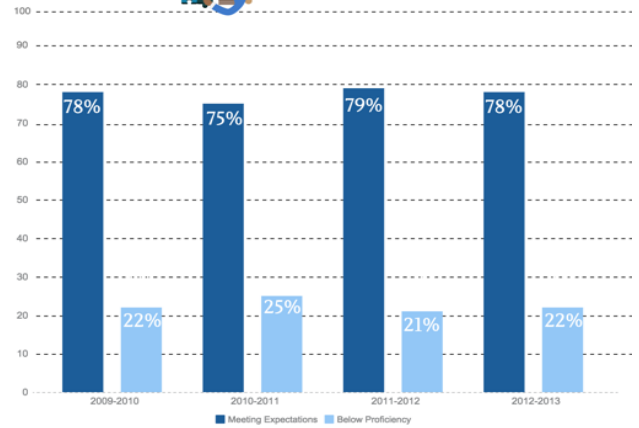
### Gross Motor



## Self-Help



## Fine Motor



This brief review of developmental skills among public kindergarteners in the Virgin Islands indicates areas of relative strength as well as areas in need of critical attention for improvement. In particular, rates of *below proficient* developmental skills suggests that readiness for kindergarten may be adversely affected with respect to the Language and Cognitive domains. These two knowledge areas are of particular importance with respect to later development. Cognitive development is central to preparation for school and is strongly associated with later academic performance.<sup>14</sup> Language is an important aspect of cognitive development and school readiness, with preschool language found to predict later literacy.<sup>15</sup>

### Looking Ahead: What Can We Do?

Addressing the issues of school readiness and early childhood success will require attention and action with respect to the multiple influences on early child development, including the contributions of family and neighborhood, home environments, parenting practices, health status, health behaviors, community supports, child care, and early education. By drawing on currently available local data, we hope to encourage territory-wide use of relevant indicators as policy levers. Indicators that can be measured and tracked reliably make it possible to:<sup>16</sup>

- Describe child, family, and community conditions
- Track trends over time
- Measure progress towards improving child outcomes
- Improve programs for children and families
- Inform state and local planning and policymaking
- Monitor the impact of investments and policy choices.

This issue brief is the first in a series that will focus on further examination of the challenges facing young VI children and their families. A particular emphasis will be placed on highlighting best practices in the various domains of school readiness and providing recommendations for stakeholder action. For more data on the well-being of V.I. children and families, visit the Virgin Islands data page of the KIDS COUNT Data Center: <http://datacenter.kidscount.org/data#VI>

<sup>1</sup> Thompson, R. (Spring/Summer 2001). Development in the First Years of Life. *The Future of Children: Caring for Infants and Toddlers, Vol. 11, No.1*.

Shonkoff, J. & Phillips, D., Eds. (2002). *From Neurons to Neighborhoods: The Science of Early Childhood Development*. Washington, DC: National Academies Press.

<sup>2</sup> Halle, T., Forry, N., Hair, E., Perper, K., Wandner, L., & Vick, J. (2009). Disparities in early learning and development: Lessons from the early childhood longitudinal study – birth cohort (ECLS-B). Washington, DC: Child Trends.

<sup>3</sup> Halle et al. (2009)

Denton, K., & West, J. (2002). Children's reading and mathematics achievement in kindergarten and first grade (NCES 2002-125). Washington, DC: US Department of Education, National Center for Education Statistics.

<sup>4</sup> Lee, V., & Burkham, D. (2002). Inequality at the starting gate: Social background differences in achievement as children begin school. Washington, DC: Economic Policy Institute.

Halle et al. (2009)

Shonkoff, J. & Phillips, D., Eds. (2002)

<sup>5</sup> Duncan, G. J., Dowsett, C. J., & Claessens, A. (2007). School readiness and later achievement. *Developmental Psychology, 43*(6), 1428-1446.

Hair, E., Halle, T., Terry-Humen, E., Lavelle, B., and Calkins, J. (2006). Children's school readiness in the ECLS-K: Predictions to academic, health, and social outcomes in first grade. *Early Childhood Research Quarterly, 21*(4), 431-454.

<sup>6</sup> Sawhill, I.V., Winship, S., & Grannis, K.S. (2012). *Pathways to the middle class: Balancing personal and public responsibilities*, Washington, DC: Center on Children and Families at the Brookings Institution, 8.

<sup>7</sup> National Education Goals Panel. (1995). *Reconsidering children's early development and learning: Toward common views and vocabulary*. Washington, DC: National Education Goals Panel.

Reconsidering Children's Early Development and Learning: Toward Common Views and Vocabulary. (1994). Washington, DC: National Education Goals Panel.

<sup>8</sup> School Readiness: Helping Communities Get Children Ready for School and Schools Ready for Children. (2002). Washington, DC: Child Trends.

<sup>9</sup> Rhode Island KIDS COUNT. (2005). *Getting Ready: Findings from the National School Readiness Indicators Initiative: A 17 State Partnership*.

<sup>10</sup> Currie, J. (2005). Health disparities and gaps in school readiness. *The Future of Children – School Readiness: Closing Racial and Ethnic Gaps, 15*(1), 117-138.

<sup>11</sup> Lee, V. & Burkham, D. (2002)

Shonkoff, J. & Phillips, D., Eds. (2002)

<sup>12</sup> Hart, Betty & Risley, Todd R. (2003). The Early Catastrophe: The 30 Million Word Gap by Age 3. *American Educator 27*(1), 4-9.

<sup>13</sup> Thompson, R. (Spring/Summer 2001)

<sup>14</sup> Claessens, A., Duncan, G. & Engel, M. (2009). Kindergarten skills and fifth-grade achievement: Evidence from the ECLS-K. *Economics of Education Review, 28*, 415-427.

<sup>15</sup> Weigel, D.J., Martin, S.S., & Bennett, K.K. (2005). Ecological influences of the home and the child-care center on preschool-age children's literacy development. *Reading Research Quarterly, 40*(2), 204-233.

<sup>16</sup> Rhode Island KIDS COUNT. (2005). *Getting Ready: Findings from the National School Readiness Indicators Initiative: A 17 State Partnership*.