

# School Readiness in Alameda County 2009

Results of the Fall 2009 Assessment

## Executive Summary



Applied Survey Research  
P.O. Box 1927  
Watsonville, CA 95077  
(831) 728-1356

991 West Hedding St. , Suite 102  
San Jose, CA 95126  
(408) 247-8319

[www.appliedsurveyresearch.org](http://www.appliedsurveyresearch.org)

April 14, 2010

# Executive Summary

---

## Background

Each fall, Alameda County schools and teachers welcome a diverse mix of students into their classrooms to start school. The diversity of this student population encompasses not only ethnic, linguistic, and socioeconomic differences, but also differences in how ready students are to launch successful school careers.

To help ensure that students entering school have every opportunity to succeed, First 5 Alameda County (F5AC) provides a comprehensive set of services and supports that enhance children's health and well-being through their first five years. Focusing on county regions where there are disproportionately high levels of poverty, neighborhood violence, and poor health outcomes, F5AC delivers family support services, promotes high quality early care and education, and works with various partners in schools, healthcare, and other community settings to improve outcomes for children.

In 2009, F5AC commissioned Applied Survey Research (ASR) to conduct an assessment of the school readiness levels of new kindergarten students for the second consecutive year. The assessment occurred in targeted county regions in five school districts where there were many low-performing schools —i.e., where many F5AC efforts and interventions have been focused. The Fall 2009 readiness assessment included an examination of the child and family characteristics of students entering kindergarten, and it investigated three primary questions related to their school readiness levels:

1. How – and to what extent – are the sampled kindergarten students ready for school?
2. What family factors and child characteristics are associated with heightened school readiness?
3. What is the relationship between participation in F5AC programs and children's school readiness?

## Overview of the Assessment Method

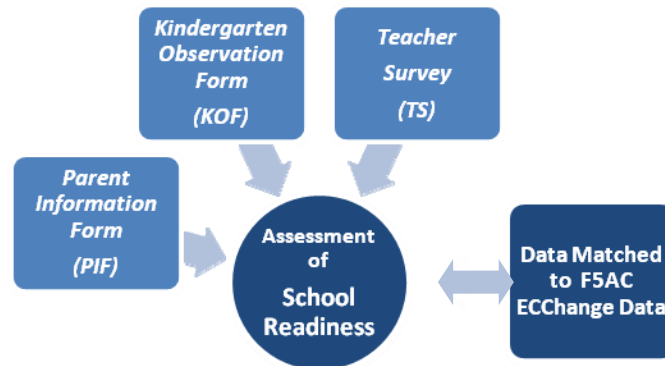
Nine years ago, ASR created a method of school readiness assessment that has since been used in several Bay Area counties, as well as other parts of California and other states. F5AC first contracted with ASR to implement a pilot assessment of school readiness in Alameda County in Fall 2008, inviting schools and classrooms in three districts – San Lorenzo Unified School District, Livermore Valley Joint Unified School District, and Oakland Unified School District – to participate. Consent rates for this initial study were very high – 81% of parents consented to have their child participate in the study.

In Fall 2009, these same districts, along with two new districts – Hayward Unified and Emery Unified – were invited to participate once again in a study examining the readiness levels of students entering kindergarten. Participating kindergarten teachers were trained to serve as expert observers of their students, rating the proficiency of each child in their classroom across

24 readiness skills. As in 2008, over eighty percent of parents agreed to have their children assessed (consent rate = 81%), yielding observations of 521 children. These observations delivered detailed information about the sampled children’s readiness as they entered kindergarten – both the areas in which children were well-skilled, as well as the areas in which they needed extra supports.

Detailed observations of the children were enriched by information gathered on each child’s family. Parents of the assessed children completed a survey that provided a window into the family and community factors that are associated with children who arrive ready (and not) for kindergarten. The response rate for the *Parent Information Form* was very high – 93 percent of consenting families returned a completed form. In addition, all participating teachers reported their viewpoints on and priorities for readiness via a *Teacher Survey*. ASR drew upon these sources of information – child assessments as measured by the *Kindergarten Observation Form (I and II)*, family information as measured by the *Parent Information Form*, and teacher viewpoints gathered via the *Teacher Survey* – to construct a comprehensive picture of children’s readiness for school, as well as the factors associated with higher readiness levels. An additional source of data came from F5AC’s ECChange database, which contains records of those who have received F5AC services. Children in the assessment were matched to records in this database in order to examine the association between their readiness levels and their participation in F5AC programs and services.

**Figure A. Sources of Information to Assess the Readiness of Incoming Kindergarten Students**



## Findings

### Students and families in the assessment

Information collected in the Alameda County school readiness assessment underscores the challenges that are present in the schools and among many of the families of students in communities targeted in this assessment, including the following:

- Sixty percent of the students were English Learners.
- Forty-seven percent of students spoke Spanish as their primary language, 38 percent spoke English, and five percent spoke Chinese. Small percentages spoke Filipino/Tagalog, Vietnamese, Farsi/ Dari, or another language as their primary language.

- Fifty-five percent of children had a mother whose highest level of education was high school or less.
- Many families were struggling financially; 62 percent indicated that their household income was less than \$35,000, 46 percent were on Medi-Cal, and 10 percent were receiving insurance through Healthy Families.
- One in ten students (10%) had been born to a teen mother; one in four (25%) were from a single parent household, and 39 percent of parents had lost a job in the past year.

**Figure B. Portrait of Students**

Child/ family characteristic	Percent of students
<b>Ethnicity</b>	
Hispanic/Latino	52%
Asian	16%
Caucasian	11%
African American	11%
Pacific Islander	3%
Alaskan Native or American Indian	<1%
Multi-racial	6%
Other / don't know	<1%
<b>Percent English Learners</b>	<b>60%</b>
<b>Primary language</b>	
Spanish	47%
English	38%
Chinese/ Mandarin/ Cantonese	5%
Filipino/ Tagalog	3%
Vietnamese	2%
Farsi or Dari	<1%
Korean	0%
Other language	3%
English & Spanish together	1%
<b>Mother has no education post high school</b>	<b>55%</b>
<b>Markers of low income</b>	
Household income is less than \$35,000	62%
Receive Medi-Cal	46%
Receive Healthy Families	10%
<b>Child was born to a teen mother</b>	<b>10%</b>
<b>Single parent household</b>	<b>25%</b>
<b>Parent lost job in the last year</b>	<b>39%</b>

Source: Kindergarten Observation Form (2009).

Note: Percentages may not sum to 100% due to rounding. Sample sizes range from 349-521.

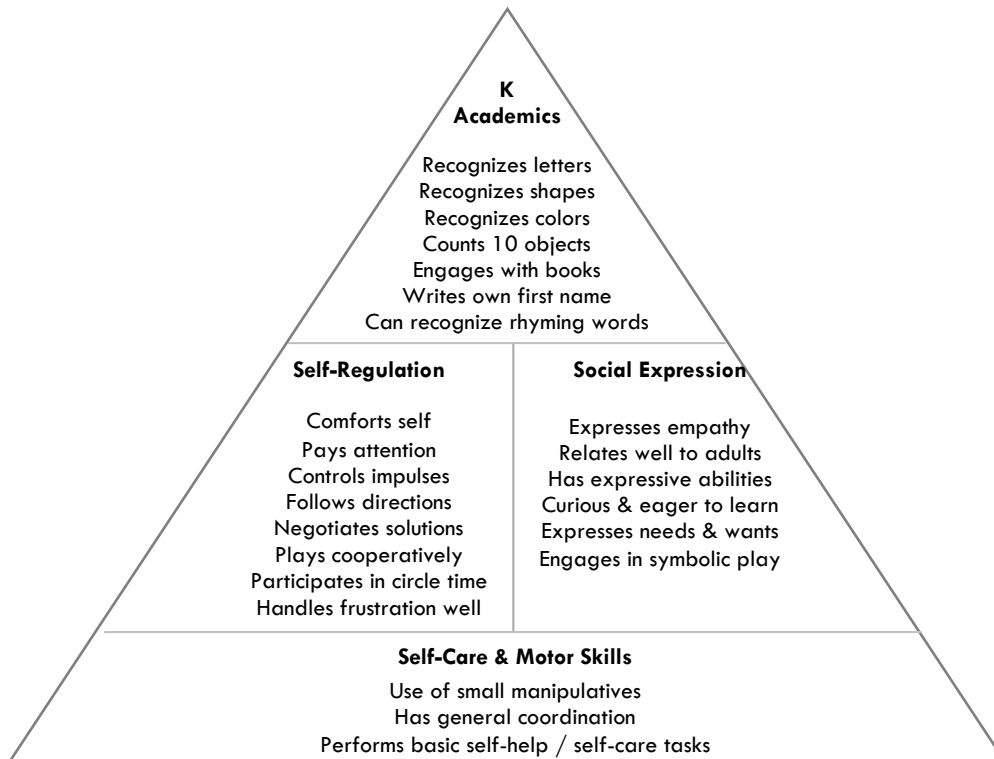
**How – and to what extent – are children ready for kindergarten?**

There are multiple dimensions of kindergarten readiness. Statistical exploration of children’s performance across 24 readiness skills revealed that skills reliably sort into four *Basic Building Blocks* of readiness:

1. *Self-Care & Motor Skills*
2. *Social Expression*
3. *Self-Regulation*
4. *Kindergarten Academics*

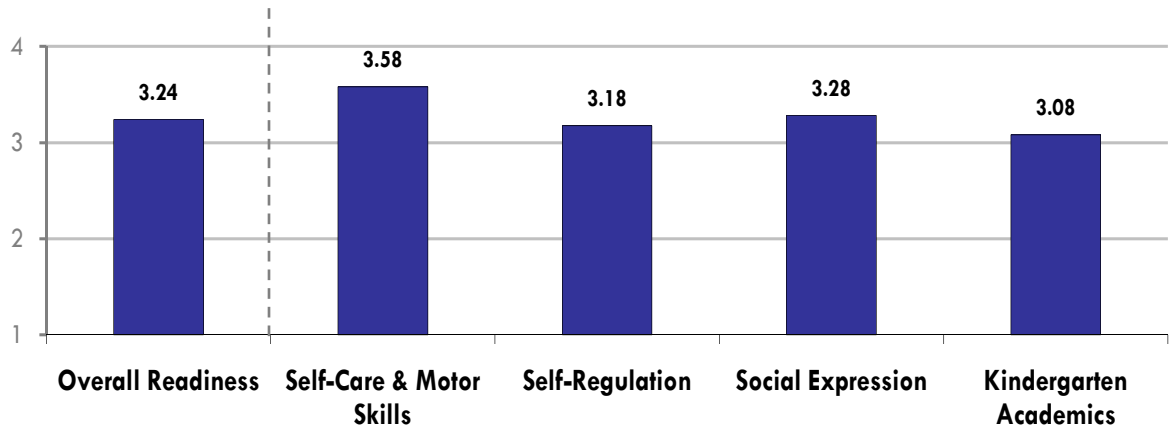
Figure C shows the 24 individual skills on which children were assessed, as well as how the skills sort into the four *Basic Building Blocks*.

**Figure C. *Basic Building Blocks* of Readiness**



The chart that follows shows children’s readiness levels across the *Basic Building Blocks*. Children tended to score highest on *Self-Care & Motor Skills* (average score = 3.58 out of 4 possible) and to have the greatest room to grow in their *Kindergarten Academics* skills (average score = 3.08). Across all the readiness skills measured, children’s average skill level was 3.24 – well above the “In progress” level.

**Figure D. Average Readiness Scores, Overall and for Each *Basic Building Block***



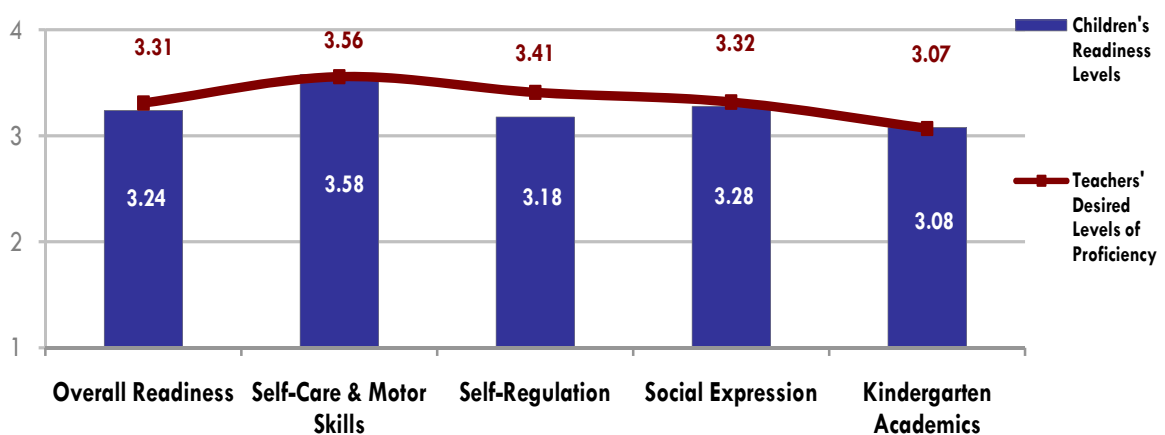
Source: Kindergarten Observation Form I (2009).

Note: Scores are based on 498-521 students. Means can range from 1 to 4. Scale points are as follows: 1=not yet, 2=just beginning, 3=in progress, 4=proficient.

How did these readiness levels compare to the expectations that kindergarten teachers had for their students? The figure that follows maps the readiness levels displayed above to the levels of readiness levels that teachers reported students should have when they start school. The lines drawn across the length of the figure show teachers' average expectations, on top of the students' actual readiness levels.

The figure shows that children's skills are roughly equal to their teachers' expectations for *Self-Care & Motor Skills* and *Kindergarten Academics*. Children are slightly less proficient than teachers would like in their *Social Expression* skills. The biggest gap between teachers' expectations and children's skill levels exists for *Self-Regulation* skills; students' average skill levels are far below where their teachers would like them to be.

**Figure E: Students' Skill Levels in the Context of Teachers' Desired Proficiencies**



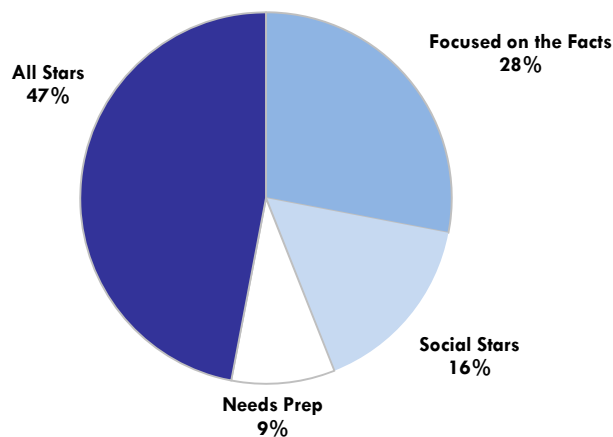
Source: Kindergarten Observation Form I (2009) and Teacher Survey of the Importance of Readiness Skills (2009).

Note: Scores are based on 498-521 students and 30 teachers. Means can range from 1 to 4. Scale points are as follows: 1=not yet, 2=just beginning, 3=in progress, 4=proficient.

Children exhibited different patterns of readiness strengths and challenges as well. For a more detailed look at their different patterns of readiness, children were sorted into one of four *Readiness Portraits* – *All Stars*, *Social Stars*, *Focused-on-the-Facts*, and *Needs Prep* students – based on their pattern of proficiency across the readiness skills.<sup>1</sup>

- Slightly less than half (47%) of children entered kindergarten classrooms as *All Stars* – near-proficient across the board in all four *Basic Building Blocks* of readiness. These children were well-prepared to succeed in school.
- Nine percent of students demonstrated readiness needs across all four of the readiness dimensions. These children sorted into the *Needs Prep* group – those who were not yet or just beginning to develop the skills they need to be successful in kindergarten.
- The remaining children exhibited mixed patterns of readiness. *Social Stars* (16% of children) were well-equipped on the social-emotional dimensions of readiness, but they had needs in the realm of *Kindergarten Academics* – learning their letters, numbers, shapes, and colors.
- In contrast, more than one out of every four students (28%) sorted into the *Focused-on-the-Facts* group. These students were doing well in their early academics; however, they demonstrated greater challenges in the social-emotional areas of readiness (skills within the *Self-Regulation* and *Social Expression* dimensions).

**Figure F. The Prevalence of Each Readiness Portrait**



Source: Kindergarten Observation Form I (2009).

Note: This chart is based on 484 students.

<sup>1</sup> Children were sorted into one of the four *Readiness Portraits* via a data-driven technique called cluster analysis. Labels for these portraits are used only at the group level, for descriptive purposes, and are never applied to individual students.

Relative to children in the other *Readiness Portraits*, children in the *All Star* portrait tended to be older, were more likely to be girls, and were more likely to come from families with higher education levels and incomes.

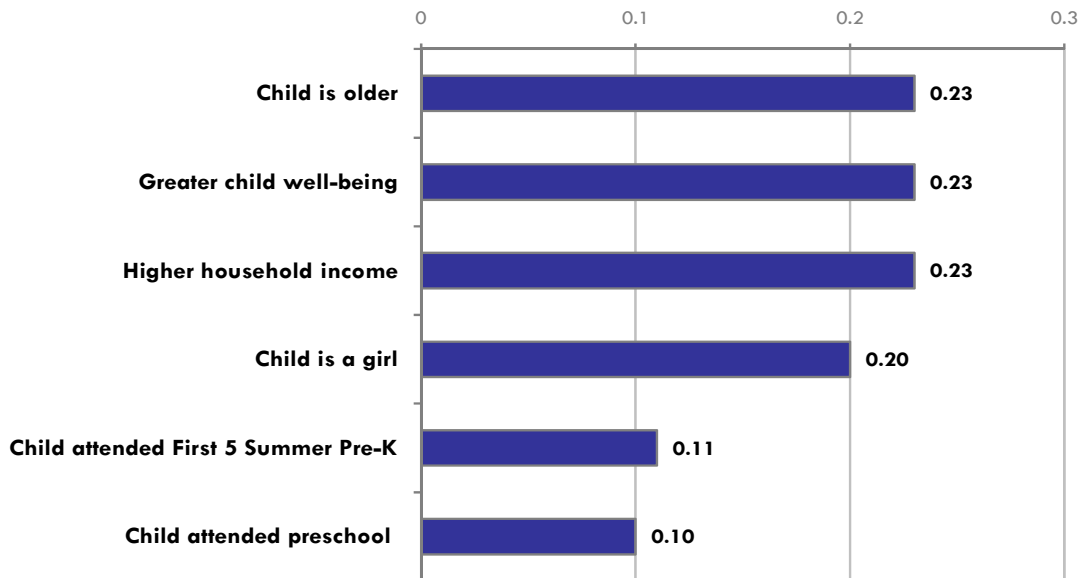
**What family factors and child characteristics are associated with heightened school readiness?**

A set of analyses was conducted to examine what factors were associated with greater school readiness. Unlike the analyses described above, these analyses allowed us to take into account all important measured variables simultaneously, so that the relationship between readiness and particular family, student, and school-level factors could be examined after “ironing out” the influence of other, related factors.

Results indicated that six factors explained 28 percent of the assessed Alameda County students’ readiness scores. The strongest predictors of readiness included being older, scoring highly on an index of basic well-being (teacher reports of whether a child seemed well-fed, well-rested, and generally healthy), and being from a household with a higher income.

Being a girl and having experience in either the F5AC Summer Pre-K program or a licensed preschool or childcare center (including Head Start, State Preschool, or private programs) were also significantly associated with higher readiness levels.

**Figure G. Relative Strength of Factors Significantly Associated with Overall School Readiness**



Source: Kindergarten Observation Form I and Parent Information Form (2009).

Note: Values for each factor listed above represent standardized beta coefficients that were significant ( $p < .05$ ). For a full listing of all variables entered into the model, see text. The overall regression model was significant,  $F = 6.66$ ,  $p < .001$ , explaining 28% of the variance in kindergarten readiness ( $R^2 = .33$ ; Adj.  $R^2 = .28$ ).



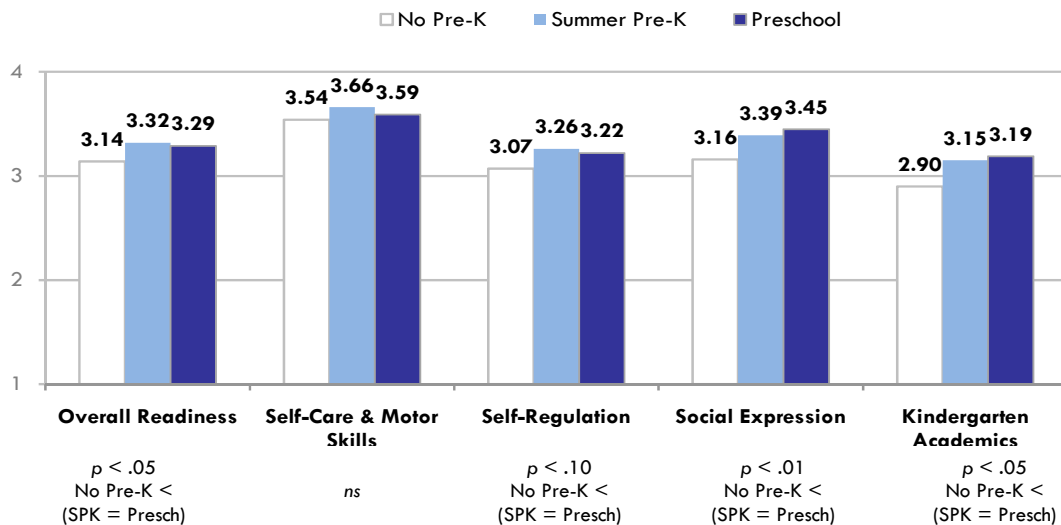
### What is the relationship between participation in F5AC programs and children’s school readiness?

The analyses presented above show that enrollment in F5AC’s Summer Pre-K was a significant predictor of students’ overall readiness levels – at a level comparable to that of a licensed preschool or childcare center. In an additional set of analyses, ASR compared the average readiness levels of participants in F5AC’s Summer Pre-K program to their peers’ readiness, after adjusting for several differences across the groups of children. Children were divided into three groups: (1) those without preschool experience of any kind; (2) those who were verified through the F5AC database as having attended their Summer Pre-K program; and (3) those who had attended a licensed preschool or childcare center, including Head Start, State Preschool, or private programs.

Results are shown in the figure below. Two significant patterns emerge from these data:

- The Summer Pre-K students had significantly or marginally higher readiness scores than did students with no pre-K experience for *Self-Regulation*, *Social Expression*, and *Kindergarten Academics* skills.
- In fact, on these three skill dimensions, the Summer Pre-K students had statistically similar readiness levels as their peers who had attended a longer-term licensed preschool or childcare center.

**Figure H. Students’ Readiness as a Function of Pre-K Experience (Means Adjusted for Family Risk and Special Needs Status)**



Source: Kindergarten Observation Form I (2009).

Note: Means can range from 1 to 4. Scale points are as follows: 1=not yet, 2=just beginning, 3=in progress, 4=proficient. Scores are based on 166-176 “No Pre-K” students, 67-69 “Summer Pre-K” students, and 218-227 “Preschool” students. Differences in mean scores are indicated above, according to oneway analyses of covariance, controlling for special needs status and average family risk score on a 10-item risk index; post-hoc tests revealed marginal or significant group differences as indicated above.

## How Did 2008 and 2009 Samples Compare?

**Comparisons of results across the assessments conducted in 2008 and 2009 must be made with caution** – the samples included children from different county regions, and neither sample was intended to be generalizable to a larger population. As a result, it is impossible to determine the extent to which any differences observed in 2008 and 2009 are due to changing trends versus a reflection of the inclusion of different students in 2009.

However, in 2009, students included in the study tended to have slightly higher readiness levels than did the students in the 2008 sample, particularly in *Kindergarten Academics* and *Self-Care & Motor Skills*. This was true despite some differences in the sample – fewer girls, more students from low-income backgrounds and Low API schools – that are typically associated with lower readiness levels.

It is also worth noting that there were some striking difference in 2008 and 2009 in families' economic situations – for example, a jump in the percentage of families with household incomes less than \$35,000 jumped from 52 percent to 61 percent, and a much higher percentage of parents had lost a job in the past year (23% in 2008 versus 39% in 2009). Again, it is unclear how much of this difference is due to recent economic conditions versus different children included in the sample, but this data is a sign that many children entered school with significant challenges in their family and home lives.

## Summary

Data from the Fall 2009 readiness assessment in Alameda County revealed a group of children and families that came from diverse racial and ethnic backgrounds, with six in ten speaking a language other than English as their primary language. Many of these families were also struggling financially.

Despite these challenges, however, children were entering kindergarten generally well-prepared for school. Average levels of readiness were well above the “In progress” level, and close to half of students were at or near proficiency across the full spectrum of readiness skills. Some children – just under one in ten – did enter kindergarten with strong readiness needs across the board.

Results of an analysis looking at predictors of readiness reinforced findings from previous readiness studies – girls and older students tend to have higher readiness levels, and children who are better off financially enter school more ready than their peers. In addition, however, some predictors of readiness include things that communities and families can address – including ensuring that all children are healthy, well-fed, and well-rested, and exposing children to high-quality early education experiences. Promising data for the second consecutive year suggest that even short-term Summer Pre-K programs such as the one offered by F5AC may do a great deal to help children begin kindergarten with the skills they need for launching a successful school career.