School Readiness in Alameda County 2009













Results of the Fall 2009 Assessment

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District	Schools	Teachers
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		Marti Jory
	Grant Elementary	Kathy Hutchinson
	Dayton Elementary	Denise Landry
		Janice Bruce

District	Schools	Teachers
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	Corvallis Elementary	Margaret Penaranda
		Kirsten Hynds
		Melinda Day
	Del Rey Elementary	Lin Walker
	Colonial Acres Elementary	Yolanda Arredondo
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		Dora Rios
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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

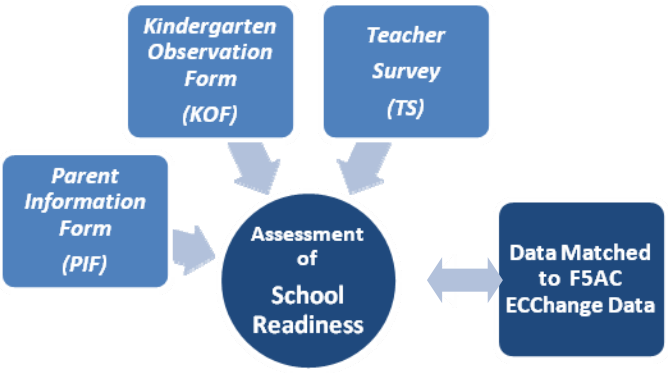
Nine years ago, ASR created a method of school readiness assessment that has since been used in several Bay Area counties, as well as other parts of California and other states. F5AC first contracted with ASR to implement a pilot assessment of school readiness in Alameda County in Fall 2008, inviting 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
Ethnicity	
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%
Percent English Learners	60%
Primary language	
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%
Mother has no education post high school	55%
Markers of low income	
Household income is less than $35,000	62%
Receive Medi-Cal	46%
Receive Healthy Families	10%
Child was born to a teen mother	10%
Single parent household	25%
Parent lost job in the last year	39%

Source: Kindergarten Observation Form (2009).

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

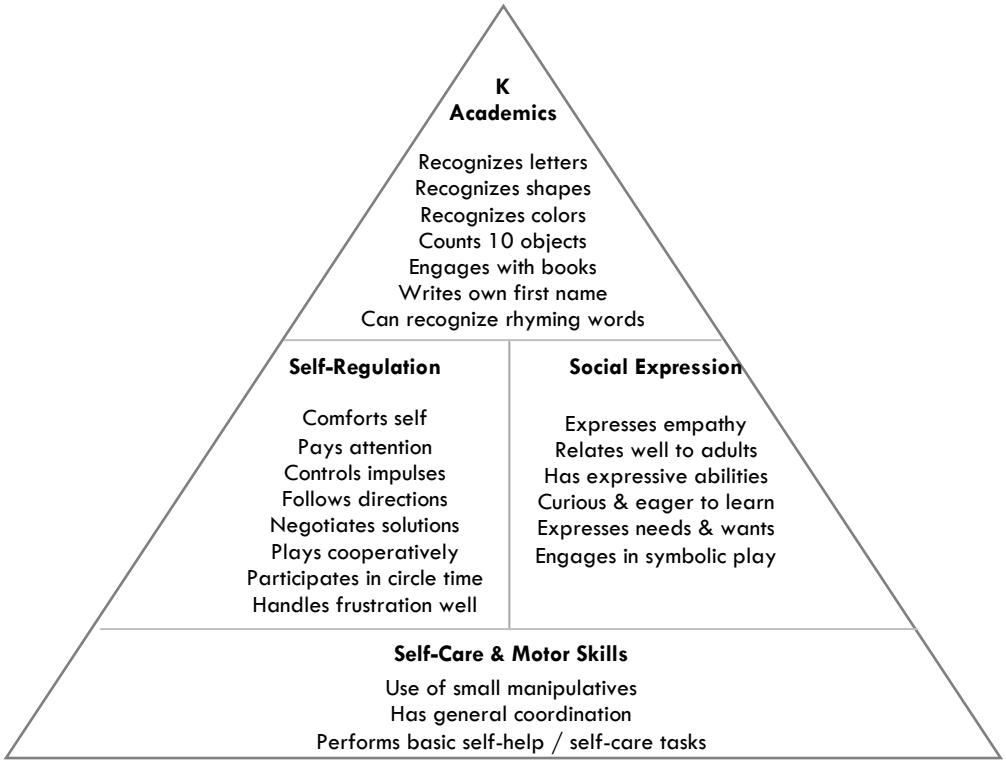
How – and to what extent – are children ready for kindergarten?

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*

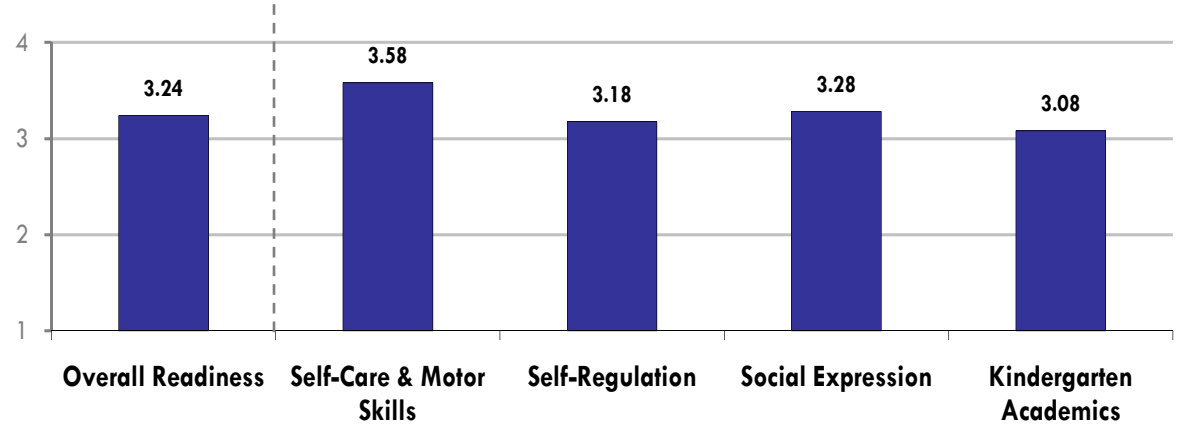
Figure C shows the 24 individual skills on which children were assessed, as well as how the skills sort into the four *Basic Building Blocks*.

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*



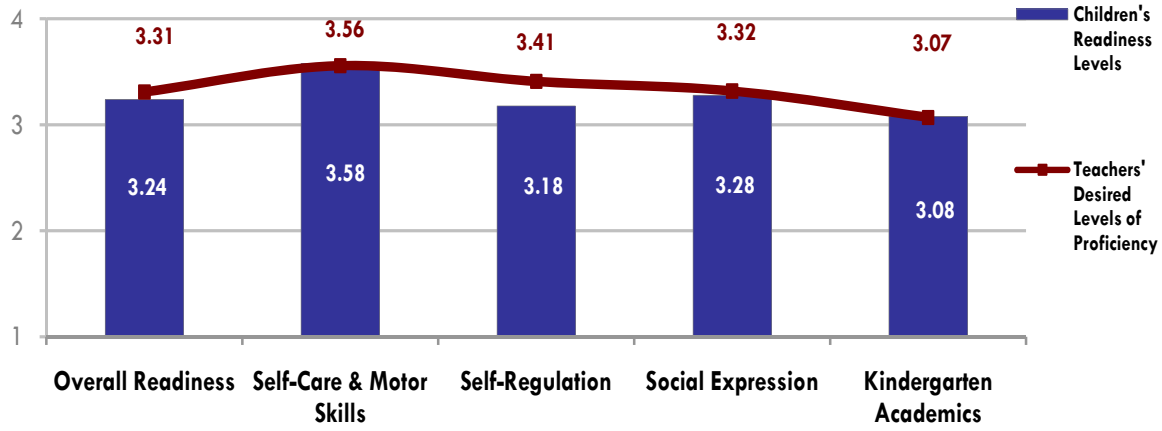
Source: Kindergarten Observation Form I (2009).

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



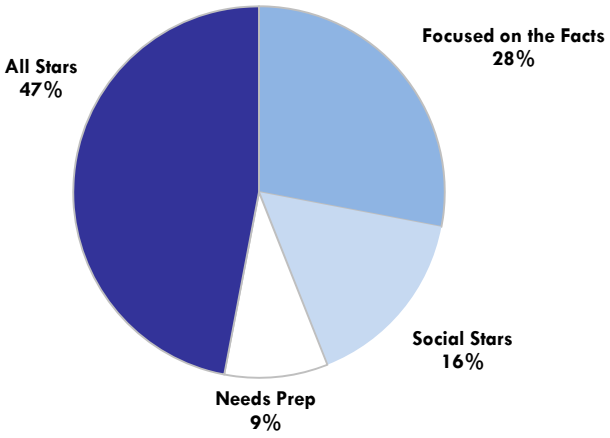
Source: Kindergarten Observation Form I (2009) and Teacher Survey of the Importance of Readiness Skills (2009).

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.[1]

- 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.

[1] 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.

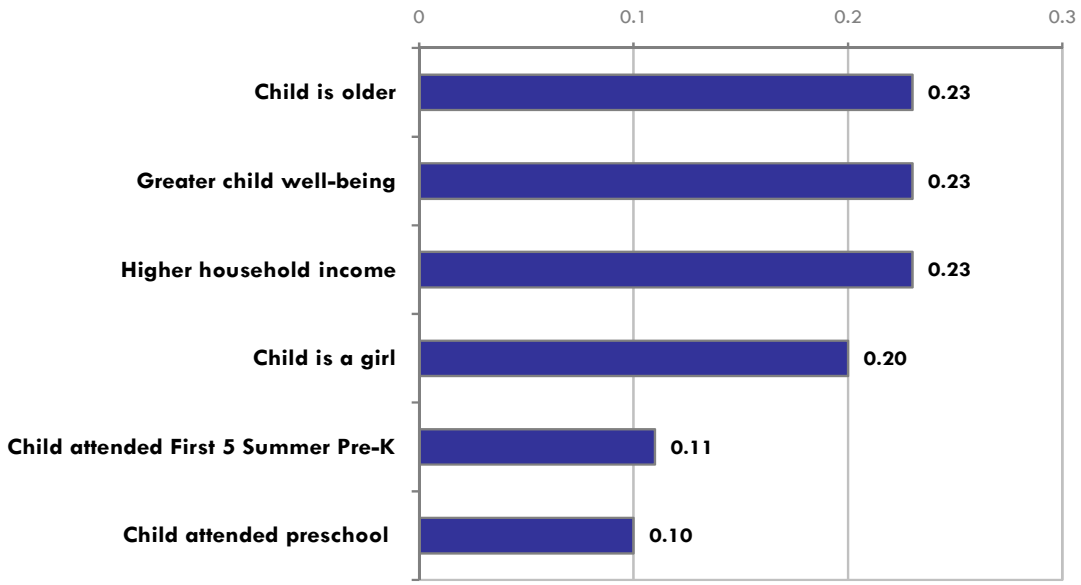
What family factors and child characteristics are associated with heightened school readiness?

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?

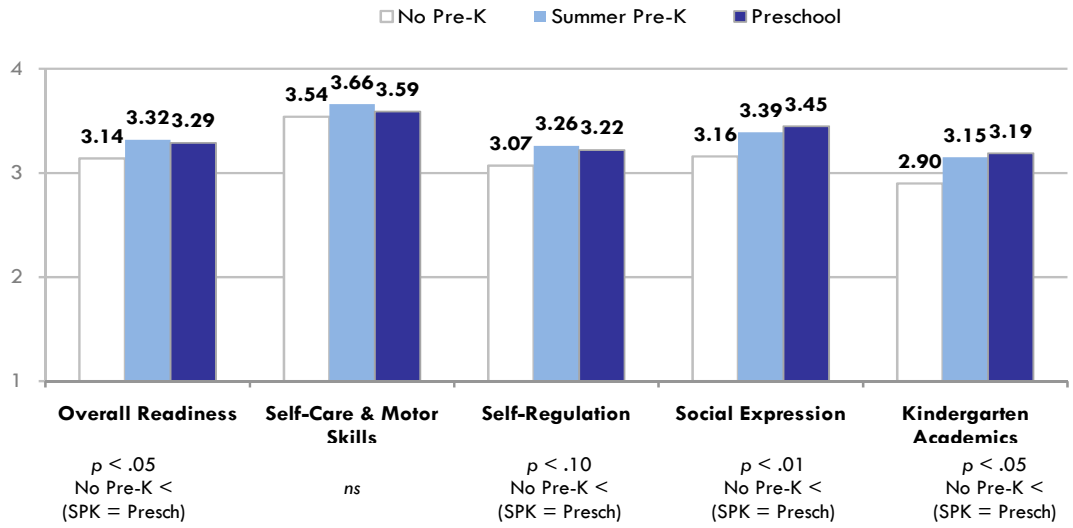
The analyses presented above show that enrollment in F5AC's Summer Pre-K was a significant predictor of students' overall readiness levels – at a level comparable to that of a licensed preschool or childcare center. In an additional set of analyses, ASR compared the average readiness levels of participants 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.

Introduction

School Readiness: What Is It?

In recent years, the issue of children's readiness for school has received increasing attention from policymakers, professionals, researchers, the media, and caregivers. In one sign of the increasing recognition of this issue, California Assemblymember Julia Brownley recently proposed statewide legislation that would "require the [State Department of Education] to collect data that will assess the school readiness of children entering kindergarten and that reflect all of the major domains of child development, as specified" (AB 2553 – Brownley; introduced February, 2010).

Definitions of what constitutes school readiness have varied somewhat. Broadly conceived, school readiness is easy to define; it suggests the existence of a variety of skills that facilitate a child's ability to succeed in school. However, coming to a consensus on the skills that are essential for school success has been more challenging, and a number of research efforts have focused on identifying the specific skills that are critical components of school readiness.

In 1995, the National Education Goals Panel (NEGP) defined school readiness as involving three critical components: (1) readiness of children for the social and academic institution of school; (2) readiness of families and communities to prepare children for school; and (3) readiness of schools to meet the diverse needs of incoming students and their families. With respect to the first component – children's readiness for school – the NEGP conceptualized five dimensions of development and skills that are critical to a child's readiness for school: *Physical Well-Being & Motor Development, Social & Emotional Development, Approaches Toward Learning, Communication and Language Usage,* and *Cognition & General Knowledge.* In different communities throughout the country, these NEGP dimensions of readiness have become the foundation for the development of school readiness measurement tools attempting to quantify children's school readiness.

NATIONAL EDUCATION GOALS PANEL
Definition of School Readiness:

- **Readiness of children** for the social and academic institution of school
  - Physical Well-Being & Motor Development
  - Social & Emotional Development
  - Approaches Toward Learning
  - Communication & Language Usage
  - Cognition & General Knowledge
- **Readiness of families and communities** to prepare children for school
- **Readiness of schools** to meet the diverse needs of incoming students and their families

Why Does School Readiness Matter?

Why should we study children's readiness for school? A growing body of research supports the notion that children learn more complex concepts by building upon early skills; in the domain of school readiness, this suggests that children's social and cognitive readiness for school acts as a "springboard" for later success in school. The five NEGP dimensions of readiness have all been found to contribute to a child's success in school (Kagan, et. al., 1995). In particular, children who have competence across these five dimensions are more likely to succeed academically in first grade than are those who are competent in only one or two dimensions (Hair, et. al., 2003).

A number of other studies have found linkages between early school readiness and later success in school. For example:

- Children who have difficulty paying attention, following directions, getting along with others, and controlling negative emotions of anger and distress tend to do less well in school (e.g., Raver & Knitzer, 2002; Raver, 2003).

- The ability to control and sustain attention and participate in classroom activities is associated with achievement test scores in the early elementary grades (e.g., Alexander, Entwisle, & Dauber, 1993).

- Learning-related behavior in kindergarten or first grade predicts literacy achievement at third grade (Stipek & Chudgar, 2010).

- Researchers from the RAND Corporation found that groups that performed less well on standardized tests in second and third grades also trailed on both cognitive and socioemotional readiness measures early in their kindergarten year (Cannon & Karoly, 2007).

- Both academic and nonacademic school readiness skills at entry to kindergarten were found to be significantly related to eventual reading and mathematics achievement in fifth grade (Le, Kirby, Barney, Setodji, & Gershwin, 2006).

- Mastery of basic numerical concepts prepares children to learn more complex math problems and problem-solving approaches (e.g., Baroody, 2003).

Perhaps one of the most comprehensive examinations of the impact of school readiness comes from a recently-published meta-analysis of six longitudinal, non-experimental data sets exploring the connections between readiness and later achievement. These researchers found that the strongest predictors of later achievement were school-entry math, reading, and attention skills (in that order). To the authors' surprise, however, measures of socio-emotional behaviors were generally insignificant predictors of later academic performance. (Duncan, Claessens, Huston, Pagani, Engel, Sexton, Dowsett, Magnuson, Klebanov, Feinstein, Brooks-Gunn, Duckworth & Japel, 2007)

These studies confirm that school readiness matters; however, their results are not entirely consistent in telling us exactly which readiness skills matter most. Local efforts exploring this question have examined non-experimental, longitudinal school readiness data and later third grade achievement test data of children that had participated in the kindergarten readiness assessments in San Mateo County in 2001-2003 (ASR, 2008). This local study of the connections between readiness and later academic performance clearly showed that readiness does matter. In particular, the following findings emerged:

- Children who entered school most ready-to-go were those who were most successful on academic tests at third grade. In fact, gaps that were seen in kindergarten readiness were still present in third grade. Specifically, gaps based on different profiles of readiness, preschool experience, English Learner status, and different ethnicities remained robust in third grade.

- The *Kindergarten Academics* skills (discussed more in the next subsection) were most closely associated with later academic success – children who entered school strong on *Kindergarten Academics* tended to have higher third grade test scores than students with poor *Kindergarten Academics* skills, but children who were strong in both *Kindergarten Academics* and *Social Expression* did best at third grade.

- Having attended preschool during the year before kindergarten was strongly associated with those readiness skills that mattered most – improved *Kindergarten Academics* and *Social Expression* skills and improved focused-attention.

Results such as these emphasize the importance of school readiness, with early education being an additional crucial component of any community's efforts to deliver every child to kindergarten ready to learn.

More recently, the journal *Pediatrics* published an article arguing that early academic preparedness is crucial for outcomes even broader than those in the domain of education. Specifically, with a host of references supporting their position, the authors of this article asserted that "cognitive development and education are arguably fundamental determinants of health" (Fiscella & Kitzman, 2009, p. 1073). They cited as support research showing associations between education and outcomes such as chronic disease rates, disability, engagement in risk behaviors, and later socioeconomic factors that in turn influence health status.

History of the Bay Area School Readiness Assessments

Development of a Local School Readiness Measure

In 2000, stakeholders in San Mateo County helped to develop and implement the first large-scale kindergarten school readiness assessment in the Bay Area. Applied Survey Research (ASR) was contracted to develop the research materials and protocol and conduct the assessment. ASR launched a comprehensive process to arrive at a set of tools that had local relevance as well as a foundation in the wider body of early education and K-12 literature.

With input from a variety of subject matter experts – including community stakeholders, child development and education experts, preschool teachers, and kindergarten teachers – ASR developed and pilot-tested a 19-item *Kindergarten Observation Form* to measure children's school readiness skills. After this pilot test, modifications were made to refine the tool, education experts again weighed in, and a more advanced skill representing phonemic awareness was added (i.e., recognition of rhyming words), resulting in a 20-item tool in which skills were organized according to the five NEGP-designated categories of school readiness.

Since that initial assessment, school readiness assessments have been conducted in San Mateo County (2002, 2003, 2005, 2008), Santa Clara County (2004, 2005, 2006, 2008), Lake County, Illinois (2005, 2006), San Francisco County, (2007, 2009), Santa Cruz County (2008), in Los Angeles Unified Preschool (2008, 2009), and in Alameda County (2008, 2009). During this time, the ASR Assessment Model's tools and methods have been continually refined and enhanced. For example, in 2004, a *Parent Information Form* was added to measure family factors that may play a role in enhancing readiness, and four additional skills have been added to the

Kindergarten Observation Form to measure social-emotional dimensions of readiness that had not been previously captured.

Shifting from NEGP to the Basic Building Blocks of Readiness

For several years, the set of skills measured by the KOF was organized and reported according to the five categories established by the National Education Goals Panel (NEGP), including: *Physical Well-Being & Motor Development, Social & Emotional Development, Approaches Toward Learning, Communication and Language Usage,* and *Cognition & General Knowledge.*

In 2005, ASR took another look at the readiness data to determine whether the pattern of results observed in the data supported the NEGP categories as most appropriate "sorting" of the readiness skills. Using an approach called factor analysis, ASR examined the readiness data that had been collected that year to see if the observed patterns of children's skill proficiency sorted according to NEGP categories, or if perhaps the pattern suggested a different set of readiness categories.

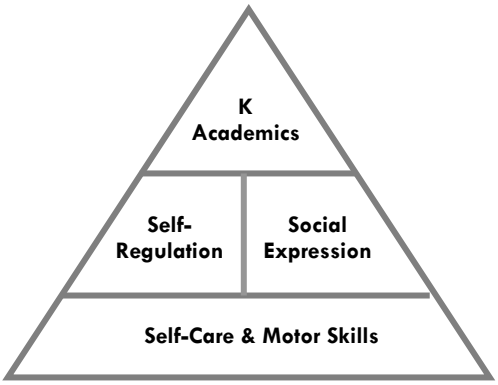
Results of the factor analysis showed that the readiness skills actually tended to group into four primary dimensions of readiness that differed from the NEGP categories. Those four dimensions were labeled the *Basic Building Blocks* of readiness, and each contained between three and seven items. They are described as follows:

- *Self-Care & Motor Skills* include those skills needed for taking care of one's basic needs or skills showing fine/ gross motor coordination.
- *Self-Regulation* skills include basic emotion regulation and self-control skills that are needed to be able to perform well in the classroom.
- *Social Expression* skills include measures related to interacting with others and engagement with play and learning.
- *Kindergarten Academics* skills represent the "nuts and bolts" skills that are more academic in nature and tend to be explicitly taught to children at home, in early care settings, and in kindergarten.

Indeed, every readiness assessment ASR has conducted since 2005 has supported these four basic components of readiness – even with the addition of four new readiness skills since the original factor analysis was conducted. Feedback from teachers and other early education experts and stakeholders has indicated that these categories have intuitive appeal as well – people quickly understand what is meant by these four skill groups, and they see children's skills sorting along these lines. Thus, in line with this compelling support for the *Basic Building Blocks* of readiness, recent school readiness assessments (including the current report) have focused on this sorting of the skills. [2]

[2] The report section "School Readiness in Alameda County – 2009" includes more information on the "crosswalking" of *Kindergarten Observation Form* skill items from the NEGP categories to the *Basic Building Blocks*.

Figure 1. *Basic Building Blocks* of Readiness



Assessing School Readiness in Alameda County

Alameda County's first measurement of kindergarten readiness using the KOF began in Fall 2008, when F5AC contracted with ASR to conduct a pilot readiness assessment in three county school districts. These districts were of particular interest to F5AC because they included a relatively high proportion of schools with low Academic Performance Index (API) scores (i.e., schools with a statewide rank of 1, 2, or 3), and a number of F5AC programs and services had been targeted to families in these regions. Indeed, data gathered from that assessment showed that many of the students in the study came from low-income, at-risk family backgrounds. Some children had extensive pre-K educational experiences, but many did not. And, as a whole, the students were an incredibly diverse group in terms of their ethnic and linguistic backgrounds.

Despite these challenges, data from the Fall 2008 readiness study showed that just under half of students entered school at or near proficiency across all the *Basic Building Blocks* of readiness, and about one in ten entered school with significant needs across the spectrum of readiness skills measured. These percentages are similar to those observed in other regional assessments that include a larger proportion of students with fewer risks and more socioeconomic advantages. However, in one area of readiness – *Self-Regulation* – students were often not meeting their teachers' expectations for readiness at kindergarten entry.

The 2008 assessment also reported promising data regarding the F5AC Summer Pre-K program; graduates of that program had enhanced readiness levels at kindergarten entry. On many skills, these Summer Pre-K students had higher readiness levels than their peers without preschool experience, and were similar to students who had attended a full preschool program.

For its second readiness study in Fall 2009, F5AC included the original three districts from 2008 and added two new districts to the sample that have also been targeted for significant numbers of F5AC interventions. As in 2008, the assessment focused on three key research questions:

- How – and to what extent – are the sampled kindergarten students ready for school?

- What family factors and child characteristics are associated with heightened school

readiness?

- What is the relationship between participation in F5AC programs and children's school readiness?

Answers to these questions – as well as detailed information on the children, families, teachers, and classrooms that make up the sample targeted for this study – are described in detail in the following sections of this report.

Methodology

Section Overview

In this section, the study tools and procedures are described, including recruitment and training of teachers, types of data collected and timelines for completion, and preparation and analysis of the data received. In addition, the study's consent and response rates are described, and notes regarding the reporting of the data are explained.

Data Collection Instruments and Administration

Four key instruments were used in this assessment. Three forms were completed by teachers: *Kindergarten Observation Form I*, *Kindergarten Observation Form II* and *Teacher Survey on Importance of Readiness Skills*. Parents provided information about their child and family circumstances on the *Parent Information Form*. The figure that follows provides a summary of each of the tool names, their content, and who completed each one.

Figure 2. Overview of Data Collection Instruments

Instrument	What Key Data Are Assessed?	Who Completes It?
Kindergarten Observation Form I (KOF I)	24 school readiness skills of children in selected classrooms	Participating kindergarten teachers. Includes teachers from San Lorenzo Unified School District, Livermore Valley Joint Unified, Oakland Unified, Hayward Unified, and Emery Unified
Kindergarten Observation Form II (KOF II)	Enjoyment of school, quality of the school transition, participation and anxiety at school of children in selected classrooms	Participating kindergarten teachers
Parent Information Form (PIF)	Pre-K childcare, kindergarten transition activities, activities in the home, demographics, parental supports	Consenting parents of children in the assessment
Teacher Survey on Importance of Readiness Skills	Expected levels of children's proficiency on skills required for successful transition to kindergarten	Participating kindergarten teachers

Kindergarten Observation Form I (KOF I)

The *Kindergarten Observation Form* was originally developed in 2001 using guidelines from the National Education Goals Panel (NEGP) framework of readiness. Readiness items reflect a range of skills, from minimum competencies, such as *Performs basic self-help / self-care tasks*, to higher-level competencies that help provide a baseline for teachers at the beginning of the year, such as *Can recognize rhyming words*. Since 2001, four additional skills have been added to better capture children's skills at negotiation, coping, empathy, and handling frustration. Thus, *Kindergarten Observation Form I 2009* assesses children across 24 readiness skills (See Appendix 1).

The *Kindergarten Observation Form I* uses teacher observation as the method of assessment. Given the research setting, this is the most appropriate, valid, and reliable method of assessment for the following reasons:

- Because student behavior can change from day to day, teachers are in a better position than outside observers to assess their students, as teachers can draw on the knowledge gained through four weeks of daily interactions.

- Teacher observation is less obtrusive and, therefore, less intimidating for students than assessment by outside observers.

- Teachers are entrusted by the school system to be children's "assessors" in other respects, such as grading, and, therefore, it is presumed that they are aware of the need for assessments to be carried out in a fair manner.

The caveat of teacher observations is that there is some risk of natural variability between teacher observers and / or risk of biased observation. To minimize variability, the assessment tool included measurable indicators (items), a clearly defined response scale, clear assessment instructions, and a thorough teacher training (see "Implementation" section for details on the trainings conducted).

Teachers were asked to observe and score each child according to his or her level of proficiency in each skill, using the following response options: *Not Yet* (1), *Beginning* (2), *In Progress* (3), and *Proficient* (4). An option of *Don't Know / Not Observed* was provided as well.

Teachers were able to complete most of the items on the *KOF I* through simple, passive observation of the children in their classrooms. A few items, however, did require one-on-one, teacher-child interaction. Additionally, teachers were requested to use passive response rather than on-demand testing techniques on several items in order to reduce anxiety for students during assessments, thereby enhancing the reliability and validity of skill assessment. If teachers could not speak the primary language of a student, they were asked to indicate this and were instructed not to assess children on a subset of skill items that required verbal interaction with the student. Consequently, there were more skills marked *Don't Know / Not Observed* or left blank for English Learner students than there were for their classmates.

The *Kindergarten Observation Form I* also includes fields to capture students' basic demographic information. Such information helps us understand who took part in the study. The collection of demographic information is also important because data are collected for key variables that have been shown to be associated with children's development (e.g., experience in curriculum-based early education settings, child age, child gender, child's presence of special needs).

As previously noted, the *Kindergarten Observation Form I* was piloted in 2001, and refined for the 2002 assessment to enhance reliability. A test of interrater reliability and validity was conducted during the Fall 2003 assessment, with results indicating that the instrument has good reliability and validity. Several years of additional assessments in different regions in and beyond the Bay Area have provided further evidence of the validity of the *KOF I,* including similar results from year to year, consistent patterns observed between and across readiness constructs from year to year, and the emergence of the same readiness correlates that have been demonstrated in other research efforts (e.g., preschool experience, age, socioeconomic status).

Kindergarten Observation Form II (KOF II)

To gather a clearer picture of children's actual adjustment to the kindergarten classroom, teachers were also asked to complete the *Kindergarten Observation Form II* (see Appendix 2) after all of their *KOF I* assessments had been completed. *KOF II* asked teachers to rate: (1) the smoothness of children's transitions into kindergarten, (2) children's anxiety levels at school, (3) children's participation in class discussion, and (4) children's enjoyment of school. Each rating was made on a four-point scale (e.g., not smooth, somewhat smooth, smooth, very smooth).

Parent Information Form (PIF)

To better understand how family factors are related to children's levels of readiness, a *Parent Information Form* (see Appendix 3) was developed for completion by parents. The *Parent Information Form* collected a wide variety of information, including: types of child care arrangements they had used during the year before kindergarten entry, ways in which families and children prepared for the transition to kindergarten, weekly number of times different activities occur in the household (e.g., reading aloud), measures of access to and use of health care, usage of several local supports and family resources, levels of parents' social support and coping, and several demographic and socioeconomic measures. Care was taken to ensure that the questions were understandable at a sixth grade reading level. Versions of the form were offered in English, Spanish, Tagalog, Chinese and Vietnamese. Because the form was lengthy, parents were offered a hard backed children's book (in their preferred language) upon completion of the form. To enhance their privacy, parents were provided with an envelope in which they could seal their completed survey prior to returning them to their child's teacher.

Kindergarten Teacher Survey on Importance of Readiness Skills

After teachers had completed all of their student assessments, they completed the *Kindergarten Teacher Survey on Importance of Readiness Skills 2009* (see Appendix 4). For this survey, teachers rated the level of proficiency that they think students need for each of the 24 *KOF I* skills in order to have a successful transition into kindergarten. Kindergarten teachers were also asked to identify the five readiness skills that they considered most important for a child to possess in order to be school-ready, the five skills that are easiest to affect during the school year, and the five skills on which they spend the most time. In addition, teachers provided some information about their classroom (i.e., whether they taught full or half-day kindergarten, whether they taught in a language other than English) and their own backgrounds. The survey was designed to take no more than 15 minutes to complete.

Implementation

Obtaining Participation Agreement

In Spring and Summer 2009, F5AC contacted school administrators in five school districts – San Lorenzo Unified School District, Livermore Valley Joint Unified School District, Oakland Unified School District, Hayward Unified School District, and Emery Unified School District – to take part in the fall readiness assessment. Of these five districts, three (San Lorenzo, Livermore, and Oakland) had been involved in the Fall 2008 readiness assessment and agreed to continue their participation. The two new districts (Hayward and Emery) were also targeted for inclusion because, like the other districts, they are in regions where F5AC programs and services tend to be concentrated. Attempts were made to secure as many participating schools and teachers as

possible within the initial group selected, and efforts were not intended to secure a sample that was generalizable to the district or county level.

School administrators from the targeted sites were provided with information about the assessment, including its purpose, what participation would involve on the part of the kindergarten teachers, and the timeline for completion of the study tasks. Ultimately, 30 classrooms representing 15 elementary schools agreed to participate in the pilot assessment. (See Figure 3 for a complete description of participation information by district.)

Teacher Trainings

Prior to or early in the start of the Fall 2009 school year, ASR conducted thorough trainings to orient the participating kindergarten teachers to the data collection forms and process. In-person teacher trainings were held in each of the five participating districts.

Trainings lasted approximately 60 minutes. After hearing a general overview of the project and study purpose, kindergarten teachers were given all project materials, including: (1) written instructions on how to complete the assessment; (2) consent letters for parents that explained the study purpose and asked parents to indicate whether or not their child would participate in the study (English, Spanish, Tagalog, Chinese, and Vietnamese versions were available); (3) *Parent Information Forms* in English, Spanish, Tagalog, Chinese, and Vietnamese; (4) *Kindergarten Observation Forms I* and *II*; (5) a sheet to track teachers' progress during the assessment (e.g., a record of parental consent, children observed and yet to be observed, *PIF*s returned); and (6) an envelope for the return of study materials to F5AC or ASR. All of these materials were fully reviewed with teachers so that they were familiar with both the teacher-completed instruments and the parent-completed instruments.

The focal point of the training was an item-by-item description of the readiness skill information to be collected via the *Kindergarten Observation Form I*. This section of the training helped ensure that different observers used the *KOF I* in a consistent way. During the review of the 24 readiness skills, particular emphasis was placed on clarifying:

- The distinction between assessing the recognition of letters of the alphabet, shapes, colors, and rhyming words (the skills assessed in this project) versus assessing the production of letters, shape names, color names, and rhyming words (skills not assessed in this project). Suggestions were provided as to how to capture recognition information (e.g., "Will you please pass me the green crayon?" and "Please point to the triangle.");

- The need for children to be assessed in their primary languages. Teachers unable to communicate with children in their primary languages were instructed to skip a set of flagged language-dependent items; and

- The administration of those items that required teacher-child interaction.

All of the teachers' questions were answered during the training sessions; in addition, teachers were encouraged to contact the researchers at any time with comments or questions about the project.

Obtaining Parental Consent

At the beginning of the school year, teachers distributed the parent consent letters and *Parent Information Forms* (see Appendix 5 for consent forms). Teachers collected all completed *Parent Information Forms* (in sealed envelopes for enhanced privacy) and consent forms from the parents. Consent from a parent was required for a student to be able to participate in the study; if a parent did not consent, teachers did not assess the child. If parents did not return a consent form indicating consent or refusal, teachers were asked to make a reasonable effort to get them to return the form; if parents still did not return a consent form despite these efforts, teachers were instructed to assume that they declined to participate, and thus teachers did not assess those parents' children.

Conducting Student Observations

Teachers were asked to conduct their student assessments approximately three to four weeks after the start of the school year, drawing upon their knowledge and observations of children during the first few weeks of school. The majority of participating teachers carried out their observations three to five weeks after their classes had started, each taking about one week to complete his/her observations. Completed *Kindergarten Observation Forms I* and *II*, *Parent Information Forms* and *Teacher Surveys on Importance of Readiness Skills* were returned to ASR directly or via F5AC.

Disbursement of Stipends

After teacher observers had assessed all of their students and had returned study materials to ASR, they were sent a "thank you" letter, their names were forwarded to F5AC, and F5AC mailed them a stipend in appreciation of their participation.

Completion Metrics

Schools

Figure 3 presents a summary of the completion metrics overall and for each of the five participating districts. Overall, there were 15 participating schools, most of which (n=8) came from San Lorenzo Unified School District. Hayward had three participating schools, Oakland had two, and Livermore and Emery each had one.

Classrooms

Thirty classrooms took part in the assessment. Just over half of the classrooms (n = 16) were in San Lorenzo. Hayward and Livermore both had five participating classrooms, and Oakland and Emery each had two.

Parent Consent and Response Rates

Overall, the parental consent rate was 81%. Consent rates were high across three districts; however, there were slightly lower consent rates in Oakland and Emery; their consent rates were 55 percent and 64 percent, respectively. Parent response rates on the PIF were high across all districts; overall, more than nine out of ten consenting parents also turned in a parent survey.

Figure 3. Completion Metrics – Alameda County School Readiness Assessment

Data	TOTAL	San Lorenzo Unified	Livermore Valley Joint Unified	Oakland Unified	Hayward Unified	Emery Unified
Number of elementary schools in targeted district	113	9	10	70	23	1
Number of schools attending orientation and training	17	8	2	3	3	1
Number of participating schools	15	8	1	2	3	1
Number of participating classrooms	30	16	5	2	5	2
Number of children in these classrooms	644	361	99	33	112	39
Number of parents consenting	521	293	95	18	90	25
Parent consent rate	81%	81%	96%	55%	80%	64%
Number of KOFs returned	521	293	95	18	90	25
Number of PIFs returned that were matched to a KOF	483	270	87	17	86	23
Parent PIF response rate (# PIFs received/ # consents)	93%	92%	92%	94%	96%	92%

Data preparation

Cleaning

Data were entered into the Statistical Package for the Social Sciences (SPSS). Following entry, the data were cleaned, using selected techniques to enhance data integrity. For instance:

- Frequencies were run on all variables to ensure that all responses fell into the appropriate ranges;
- Scores on the readiness items were examined for students with whom teachers indicated they could not communicate. If teachers inappropriately provided ratings for the language-dependent items, those ratings were deleted; and
- Several items on the *Parent Information Form* asked parents to fill in a number (e.g., the number of times they read books each week, the number of times they tell stories or sing songs each week). For these items, outlying values were identified and, when such values would inappropriately skew an average score, the top one percent of the distributions were trimmed.

Missing Values

Sometimes teachers or parents did not provide answers to specific items. None of these missing values were replaced; typically, cases with missing data were dropped from analysis. All composite scores were calculated without including missing items.

Matching of Assessment Data and F5AC Database Records

One of the key research questions in this assessment involved looking at the association between readiness levels and receipt of F5AC programs and services. To conduct this analysis, ASR was provided with information from F5AC's databases that allowed for matching of students' data across datasets. Specifically, F5AC provided ASR with a dataset of service recipients that included – only for children who were within the likely age range of the assessment – children's initials, date of birth, sex, and mother's first name, along with variables indicating which of five targeted F5AC services they had received. No names were included in the data, and adequate precautions were taken to ensure the security of the data transfer between F5AC and ASR.

Once ASR received this data, matches were sought by looking across the two data sets for matches on date of birth, sex, and mother's first name. One hundred thirty eight of the 521 assessed children (26%) were found to have received one or more F5AC services.

An Overview of Statistical Analyses Conducted

After data were cleaned, numerous statistical analyses were conducted to answer the research questions, as follows:

- Percentages were calculated and chi-square tests were run to test whether differences in percentages reached statistical significance.
- Average scores were calculated for all continuous measures and scaled items. For example, an average score was generated for each of the readiness items, excluding blank responses or responses of *Don't Know / Not Observed*.
- Composite scores (averages across multiple items) were calculated for each of the four *Basic Building Blocks* dimensions. Reliability analyses were first conducted (using Cronbach's alphas) to ensure that reliability was high before composite scores were calculated. Cronbach's alphas for each *Basic Building Blocks* scales are listed below:
    - *Self-Care & Motor Skills*: Alpha=0.87
    - *Self-Regulation*: Alpha=0.95
    - *Social Expression*: Alpha=0.93
    - *Kindergarten Academics*: Alpha=0.93
- Independent t-tests were used to test whether differences in average scores were statistically significant between two groups.
- One-way analyses of variance were conducted to test whether differences in scores were statistically significant across more than two groups; if significant overall differences were found, post hoc LSD tests were used to determine which groups were significantly different from each other.

- Analyses of covariance were used to test whether differences in average scores across groups were significantly different after controlling for key background variables (e.g., household income, maternal education).

- Regression analyses were conducted to explore the strength of relations between readiness items and various student, family, and teacher characteristics.

- Cluster analysis was used to explore whether children in Alameda County manifested different readiness profiles than have been seen in previous assessments.

Statistical Notation

Throughout this report, ASR uses the following standard abbreviations:

- *N* is used when noting the sample size for a chart or an analysis.

- *P*-values (e.g., $p < .01$) are used to note whether certain analyses are statistically significant. *P*-values that are less than .05 are statistically significant; *p*-values that are between .06 and .10 are marginally significant. All significance tests were two-tailed tests (more conservative) rather than one-tailed tests (less conservative).

- The abbreviation "*ns*" is used to flag analyses that did not reach statistical significance.

A Note about How to Interpret the Data in This Report

In both the 2008 and 2009 Alameda County assessments, schools and teachers participated in the readiness study at will. There was no attempt made to achieve representativeness at the district or county level.[3] Thus, the information presented in this report describes only the students and families assessed; **although it may hint at the broader picture of readiness in the county, the findings cannot be extrapolated to any district or county-level populations.**

Because of this – and particularly because the 2009 assessment included students from districts not in the 2008 sample – **caution should also be used when looking at any side-by-side comparisons of 2008 and 2009 data**. Although it is tempting to try to infer changes or trends over time from the findings, any differences observed between 2008 and 2009 may simply be due to the fact that different students were included in the assessment in each year. For example, as the table that follows shows, 22 percent of students in the 2009 sample are from one of the districts that had not been included in the 2008 study. With that change, the sample also shifted to include significantly more students from Low API schools in 2009 (i.e., with a statewide rank of 1, 2, or 3), as compared to 2008. (Neither year's samples included children from any High API schools [statewide rank of 8, 9, or 10], however.)

[3] There are however, subgroups within the data that have been represented completely, such as Marylin Avenue Elementary students. Please see region-level reports for more specific findings for classrooms within the five districts that participated in the assessment.

Figure 4. An Overview of Participation in 2008 Versus 2009

District and School Information	2008	2009
Percentage of sample from each district		
San Lorenzo	81%	56%
Livermore	16%	18%
Oakland	3%	4%
Hayward	0%	17%
Emery	0%	5%
Percentage of sample from each API level		
Low API school	48%	57%
Middle API school	52%	43%
High API school	0%	0%

Note: Sample size = 577 and 521. Low API is defined as a state rank of 1, 2, or 3; Middle API is state rank of 4, 5, 6, or 7. High API is 8 or above. 2008 state API ranks were used as that was the most recent data available at the time of this analysis.

Consequently, although each report section includes at the end a subsection entitled, "How Did the 2008 and 2009 Samples Compare?", it is important to remember that differences will at least in part be due to changes from 2008 to 2009 in who was invited to participate. Although there may also be shifts occurring in children's and families' experiences and practices – and students' readiness levels and transitions to kindergarten – it is not possible to determine how much change from 2008 to 2009 is due to sample differences versus actual changes that are occurring within these communities.

Section Summary

In Spring and Summer 2009, school administrators in five targeted school districts – San Lorenzo Unified School District, Livermore Valley Joint Unified School District, Oakland Unified School District, Hayward Unified School District, and Emery Unified School District – were approached by F5AC and invited to have selected schools take part in an assessment of the school readiness of their students entering kindergarten in Fall 2009. Teachers from the participating schools attended a training session in late summer – prior to or very early in the start of the school year – in which they were given information about the purpose of the study, full instructions and a timeline for completion of the study tasks, and copies of the four assessment forms to be completed.

Teachers secured consent from the parents of their students and distributed surveys that parents completed and returned in sealed envelopes. After about three to four weeks of school (when children were fairly comfortable in their new surroundings, but their skills had not yet grown significantly since kindergarten entry), teachers assessed the proficiency of each of their students across 24 readiness skills and recorded their observations. Upon completion of all the student assessments, teachers next completed a form that measured the smoothness of each child's entry into kindergarten. Finally, teachers completed a survey that asked them about their beliefs about the kinds and levels of skills children need to be well-prepared for school success. Teachers returned all of their forms to ASR and received participation stipends from F5AC. Data were processed and analyzed, and F5AC program and service recipient data were merged with the assessment data collected to examine associations between receipt of F5AC

services and readiness levels. Completion metrics indicated good consent and response rates overall, with lower consent levels in two districts.

In reading this report, it is important to keep in mind that the data represent only those who participated in the assessment, as the study was not designed to be representative of a larger population. Because of this, caution should also be used when comparing 2009 data to data collected in the 2008 readiness study.

Who Are Alameda County's 2009 Kindergarten Students?

Section Overview

Before describing how ready for school children are, it is important to know who is coming into Alameda County's kindergarten classrooms. What are their ethnic backgrounds? How many children start school with identified special needs? What kinds of early education experiences have they had? In what kinds of family environments have they spent their early years? The *Kindergarten Observation Form I* and the *Parent Information Form* gathered information on a number of demographic and socioeconomic characteristics of children and families, as well as measures of what their home and family environments were like. This section describes the students and families who were involved in the readiness assessment.

Students

Basic Demographics

There were more boys than girls in the assessment (54% versus 46% respectively). Children's average age was about five years and four months, with almost one of five children (18%) having not yet reached their fifth birthday. Only one percent of children were six years or older when they began kindergarten.

Figure 5. Students' Sex and Age Upon Kindergarten Entry

Sex	Percent of students
Sex	
Boys	54%
Girls	46%
Age (average age = 5.35 yrs)	
Between 4 1/2 and less than 5	18%
At least 5 and less than 5 1/2	46%
At least 5 1/2 and less than 6	35%
6 and older	1%

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

Note: Sample size = 515 and 520.

Students of Hispanic/ Latino backgrounds were by far the most common race/ethnicity among the assessed children, representing more than half (52%) of the students. Asian students were the next largest racial group with 16 percent of students. Caucasian and African American students each made up 11 percent of the sample, while children of multi-racial backgrounds made up 6 percent of the sample.

Figure 6. Percent of Kindergarten Students Representing Each Ethnicity

Ethnicity	Percent
Hispanic/Latino	52%
Asian	16%
Caucasian	11%
African American	11%
Pacific Islander	3%
Alaskan Native or American Indian	<1%
Multi-racial	6%
Other	<1%

Source: Kindergarten Observation Form I (2009).

Note: Sample size = 521. Percentages may not sum to 100 due to rounding.

Language Variables

Information gathered in the assessment suggests that there is great linguistic diversity among kindergarten students; in fact, English was not the primary language of most of the students included in the assessment. Six of ten students (60%) were English Learners.

Figure 7. Students' English Learner Status

Children's language status	Percent
English Learners	60%
English Proficient	40%

Source: Kindergarten Observation Form I (2009).

Note: Sample size = 509.

Almost half of students (47%) spoke Spanish as their primary language, and 38 percent of children used English as their primary language. Chinese was the next most commonly spoken language, with five percent of children speaking it as their primary language. Reflecting the diversity of Alameda County, small percentages of children spoke Filipino/Tagalog, Vietnamese, or Farsi or Dari, and three percent spoke a primary language other than one of the seven that tend to be most common in the Bay Area region.

Figure 8. Students' Primary Languages

Primary language	Percent
Spanish	47%
English	38%
Chinese/ Mandarin/ Cantonese	5%
Filipino/ Tagalog	3%
Vietnamese	2%
Farsi or Dari	<1%
Korean	0%
Other language	3%
(Teacher chose both Spanish and English)	1%

Source: Kindergarten Observation Form I (2009).

Note: Sample size = 513. Percentages may not sum to 100 due to rounding.

Teachers who were able to speak the primary language of their students were asked to rate each one's progress in his or her primary language. Results are shown in the figure below. Although most children (68%) were believed by their teachers to be "on track" with their use of language, nine percent were rated to be "delayed," and 8 percent were described as "advanced."

Figure 9. Teachers' Assessment of Children's Use of Primary Language

Children's Use of Primary Language	Percent
Delayed	9%
On track	68%
Advanced	8%
Cannot determine	15%

Source: Kindergarten Observation Form I (2009).

Note: Sample size = 508. Percentages may not sum to 100 due to rounding.

For those students who spoke a language other than English as their primary language, teachers provided their assessment of students' receptive English skills (their ability to understand English), as well as their expressive language skills (their English-speaking ability). Most of these students were still struggling to acquire both types of English skills, with 75 percent at the "beginning" or "early intermediate" levels on their receptive skills and 77 percent at the "beginning" or "early intermediate" levels on their expressive English skills.

Figure 10. Teachers' Assessment of English Skills of Children Whose Primary Language Is Not English

Children's English Skills	Beginning	Early intermediate	Intermediate	Early advanced	Advanced
Receptive language skills	45%	30%	15%	7%	3%
Expressive language skills	50%	27%	15%	6%	3%

Source: Kindergarten Observation Form I (2009).

Note: Percentages are based on 308 and 309 students, respectively. Percentages may not sum to 100 due to rounding.

Physical Health and Well-Being

In order to get a very basic sense for the physical health of entering kindergarten students, teachers were asked to use their best judgment when providing information about whether children appeared well-rested, well-fed, and generally healthy.

It would appear that the basic physical needs for almost all children are being met. According to teachers:

- Ninety-eight percent of students appeared well-rested
- Ninety- eight percent of students appeared well-fed
- Ninety-nine percent of students appeared generally healthy

Figure 11. Teacher Reports of Children's Well-Being

Well-being measures	Percent
Come to school well-rested	98%
Come to school well-fed	98%
Seem generally healthy	99%

Source: Kindergarten Observation Form I (2009).

Note: Percentages are based on 512, 511, and 515 students, respectively.

A total of 20 students were perceived by their teachers as not being well-rested, well-fed, and/or generally healthy. Most of these (n = 15) only had one well-being "flag," but three students were seen by their teachers as not being healthy on all three measures.

Who were the 20 students who did not have optimal well-being? This is an important question to investigate because in the 2008 readiness assessments (and in 2009 as well – see the section entitled, "Student and Family Factors Associated with School Readiness"), children's scores on this index of well-being emerged as a strong predictor of students' readiness scores; although very few students had such concerns, those who did were far behind their peers in their readiness. In addition, there were some concerns about this index, specifically whether teachers were able to provide this information in a generally objective manner .

Figure 12 shows how the children who appeared not to be well-rested, well-fed, and/or generally healthy differed from their peers. Because there were small numbers of these children, no statistical tests were run; however, there were some striking differences between the two groups of children. The students with well-being concerns seemed to disproportionately come from low-income households with low maternal education levels, and they were almost three times more likely to have been born to a teen mother. More than half of these children (56%) had a parent who had lost his or her job in the past year.

Figure 12. Comparing Students With and Without Teacher-Reported Well-Being Concerns

Child/ family characteristic	Students with no well-being concerns	Students with one or more well-being concerns
Average age	5.34	5.42
Percent who are girls	47%	35%
Percent with special needs	12%	11%
Percent English Learners	59%	74%
Ethnicity		
Hispanic/Latino	52%	60%
Asian	16%	20%
Caucasian	11%	5%
African American	12%	5%
Pacific Islander	3%	0%
Alaskan Native or American Indian	<1%	0%
Multi-racial	6%	10%
Other / don't know	<1%	0%
Mother has no education post high school	55%	67%
Household income is less than $35,000	61%	80%
Type of insurance		
Private insurance	43%	19%
Medi-Cal	45%	69%
Healthy Families	10%	13%
None	3%	0%
Born to a teen mother	10%	27%
Percent from single parent household	25%	24%
Percent whose parent lost job in the last year	39%	56%
Average number of addresses since child's birth	2.04	2.21

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

Note: Percentages may not sum to 100% due to rounding. Sample sizes range from 339-501 for children without well-being concerns and 10-20 for children with 1+ well-being concerns. Caution should be used in interpreting percentages and means for the children with well-being concerns, as sample sizes are quite small.

Previous research (although not in any ASR-conducted readiness studies) has shown an association between low birth weight and early school difficulties and grade retention (e.g., Byrd & Weitzman, 1994). For this reason, a question about low birth weight was included on the *Parent Information Form*. Among the children in the assessment, six percent had been born weighing less than five pounds, eight ounces.

Figure 13. Percentage of Children with Low Birth Weight

Birth weight	Percent
Child weighed less than 5 lbs 8 ounces	6%
Child did not weigh less than 5 lbs 8 ounces	92%
Don't know	2%

Source: Parent Information Form (2009).

Note: Sample size = 472. Percentages may not sum to 100 due to rounding.

Health Insurance, Receipt of Health Screenings, and Access to Health Providers

The *Parent Information Form* contained several questions relating to children's access to and use of various health services. The largest portion of students (46%) was covered by Medi-Cal. Forty-two percent were insured by their parents' private insurance, and one in ten was insured through Healthy Families. Three percent of children in the sample had no health care coverage.

Figure 14. Sources of Children's Health Insurance

Types of insurance	Percent
Private insurance	42%
Medi-Cal	46%
Healthy Families	10%
Child has no health insurance	3%

Source: Parent Information Form (2009).

Note: Sample size = 461. Percentages may not sum to 100 due to rounding.

On the *Parent Information Form,* parents were also asked if their child had a regular source of medical care and a dentist. Almost all children (98%) had a regular doctor, pediatric provider, or clinic, and 88 percent had a regular dentist.

In terms of care received during the last year, 91 percent of children had been to a dentist; 43 percent had received a developmental screening in the past year.

Figure 15. Children's Access to and Use of Health Care

Health care	Percent
Has a regular doctor, pediatric provider, or clinic	98%
Has a regular dentist	88%
Has had a dental exam in the past year	91%
Has received a developmental screening in the past year	43%

Source: Parent Information Form (2009).

Note: Sample sizes are as follows: 479, 479, 477, 394.

Special Needs

Information about children's special needs comes from two sources in our assessment: either from teachers (as reported on the *Kindergarten Observation Form I*), or from parent reports on the *Parent Information Form*. According to parents and/or kindergarten teachers, twelve percent of children were identified as having special needs at the time they entered school.

Figure 16. Presence of Special Needs

Special needs	Percent
Child has special needs, according to parent or teacher	12%
Child does not have a diagnosed special need	88%

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

Note: Sample size = 515.

Parents and teachers who indicated that a child had a special need were asked to describe that special need and to provide more information. For this data, a cautionary note is in order; because there were relatively few children with special needs in the sample, sample sizes for the figures that follow are small (e.g., 26 parents provided more detailed information about how they learned about their child's special need). Therefore, findings may not be stable and are presented for descriptive purposes only.

Almost two thirds of the parents (65%) learned about their child's special need from a pediatrician or other doctor. Twenty-seven percent of parents had learned about their child's special need from another professional.

Figure 17. How Parents Learned of Special Need

Source of diagnosis/ assessment of special needs	Frequency	Percent
Child's pediatrician or other doctor	17	65%
Another professional	7	27%
Own diagnosis/ assessment	4	15%
Other	4	15%

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

Note: These percentages are based on responses of 26 parents who indicated that a child had a special need and also answered questions about how they learned about it. Percentages sum to more than 100% because a parent could mark more than one source. Children were not identified as having special needs if the only source for the diagnosis was parent assessment. Please note that sample sizes are small; therefore, findings may not be stable.

The most common special needs mentioned were problems with speech and language, affecting 35 percent of the children with special needs in the sample.

Figure 18. Types of Special Needs, as Reported by Parents and Teachers

Types of special needs	Frequency	Percent
Speech and language	15	35%
Behavioral/ emotional	8	19%
Attention deficit and/or hyperactivity disorders	5	16%
Vision	5	12%
Hearing	5	12%
Asthma	3	7%
Physical problems	2	5%
Unspecified write-in ("Retained in K")	2	5%

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

Note: These percentages are based on write-in responses of 43 teachers and/ or parents who indicated that a child had a special need and provided a response. Percentages sum to more than 100% because a child could have more than one special need. Please note that sample sizes are low; therefore, findings may not be stable.

Children's special needs were most often diagnosed when children were over four years old (31% of children with special needs); however, there was no real trend in when children's special needs were identified – identification occurred across all age ranges.

Figure 19. Age at Identification of Special Need

Age at first identification	Frequency	Percent
Birth to 2 years old	6	23%
Just over 2 years to 3 years old	7	27%
Just over 3 years to 4 years old	5	19%
Just over 4 years or older	8	31%

Source: Parent Information Form (2009).

Note: These percentages are based on 26 parents whose children have special needs who completed information on the age their child was diagnosed. Percentages may not sum to 100 due to rounding. Please note that sample sizes are small; therefore, findings may not be stable.

Sixty-nine percent of the children with special needs had received professional help to address it; 31 percent had not received professional help.

Figure 20. Receipt of Services for Special Needs

Receipt of help for special need	Frequency	Percent
Child received help for special need	18	69%
Child did not receive help for special need	8	31%

Source: Parent Information Form (2009).

Note: These percentages are based on 26 parents whose children have special needs who completed information on receipt of services. Please note that sample sizes are small; therefore, findings may not be stable.

Families and Households

As children's school readiness can be impacted by a host of socioeconomic and family characteristics, several questions on the *Parent Information Form* sought to learn more about the children's family contexts. Several key factors relating to children's family circumstances are described in this section.

Maternal Education

Local and national readiness assessments have found strong linkages between maternal education levels and children's school readiness (e.g., Kohen, Hertzman, & Brooks-Gunn, 1998). In the current sample of assessment participants, 18 percent of mothers had not graduated from high school. Thirty-seven percent had completed high school, but had not pursued higher education. Another 12 percent had completed a bachelor's or advanced degree.

Figure 21. Highest Level of Education Completed by Child's Mother

Education	Percent of mothers
Less than 6th grade	4%
6th grade	9%
7th or 8th grade	5%
High school graduate	37%
Some college	26%
Associates degree (AA/AS)	6%
Bachelor's degree (BA/BS)	11%
Advanced degree	1%

Source: Parent Information Form (2009)

Note: Sample size = 459. Percentages may not sum to 100 due to rounding.

Household Income

Parents completing the *Parent Information Form* were asked an optional question regarding their annual household income. Most parents (72% of those returning a form) provided a response to this question. Results revealed that incomes were very low for a fair number of these families; almost two-thirds of them made less than $35,000 per year.

Figure 22. Yearly Household Income

Income range	Percent
Less than $15,000	32%
$15,000 - $34,999	30%
$35,000 - $49,999	15%
$50,000 - $74,999	11%
$75,000 - $99,999	6%
$100,000 or more	7%

Source: Parent Information Form (2009)

Note: Sample size = 349. Percentages may not sum to 100 due to rounding.

Number of People in Household

Families in the assessment reported an average of 4.8 people living in their household. Fifty percent of families had more than four people living in their household.

Figure 23. Number of People in Household

Household residents	Average	Range
Number of children 0-5 years	1.63	1 - 6
Number of children 6-7 years	0.91	0 - 6
Number of adults 18 yrs and older	2.26	1 - 8
Total household residents	4.80	2 - 13

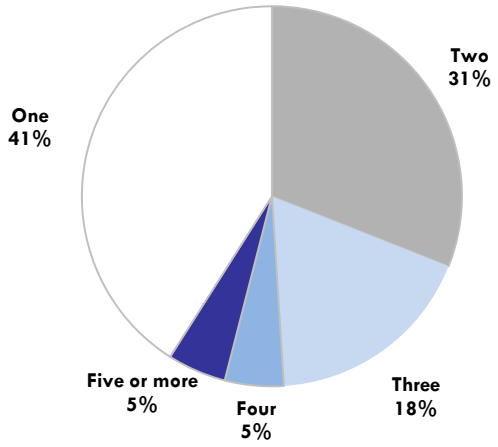
Source: Parent Information Form (2009)

Note: Sample size = 439.

Family Mobility

Parents were asked how many addresses they had lived at since the birth of their child. On average, families had lived at just over two addresses (mean = 2.06), with answers that ranged from one to nine different addresses. Responses are displayed in the figure that follows.

Figure 24. Number of Addresses Since Child's Birth



Source: Parent Information Form (2009)

Note: Percentages are based on 444 responses.

Other Indicators of Possible Family Risk

Some families in the assessment reported challenging life circumstances. One in ten children (10%) was born to a teenage mother. In addition, 25 percent of parents reported being a single parent, and 39 percent also had lost a job in the past year.

Figure 25. Indicators of Possible Family Risk

Risk variable	Percent
Teen mother when child was born	10%
Single parent	25%
Parent lost job in the last year	39%

Source: Parent Information Form (2009).

Note: Sample sizes are as follows: 446, 456, 455.

Home Languages

Parents were asked to indicate the language they used most often at home with their child. English (41%) and Spanish (39%) were most commonly cited – as well as both languages together (8%). (Despite having asked for just one language, many parents checked off more than one response.) "English" and "Filipino" were checked together as well; two percent of parents indicated that both of these were spoken most often at home.

Figure 26. Language Used Most Often at Home

Language	Percent
English	41%
Spanish	39%
Chinese/ Mandarin/ Cantonese	4%
Vietnamese	2%
Filipino/ Tagalog	1%
Farsi or Dari	<1%
Korean	0%
Other language	1%
English and Spanish both checked	8%
English and Filipino both checked	2%
English and Vietnamese both checked	<1%
English and Chinese both checked	1%

Source: Parent Information Form (2009).

Note: Sample size = 467. Percentages may not sum to 100 due to rounding.

Over one half of parents (54%) indicated they spoke English very well, whether or not it was their primary language. More than one fourth reported that they did not speak English very well or at all (27%).

Figure 27. Parents' Self-Reported Level of English-Speaking Proficiency

English -speaking proficiency	Percent
Very well; English is my primary language	35%
Very well, but English is not my first language	19%
Somewhat well; I usually- but not always- can communicate what I want to say in English	19%
Not very well; I know some words in English, but often not enough to communicate what I want to say	13%
Not at all; I know very few or no English words	14%

Source: Parent Information Form (2009)

Note: Sample size = 460.

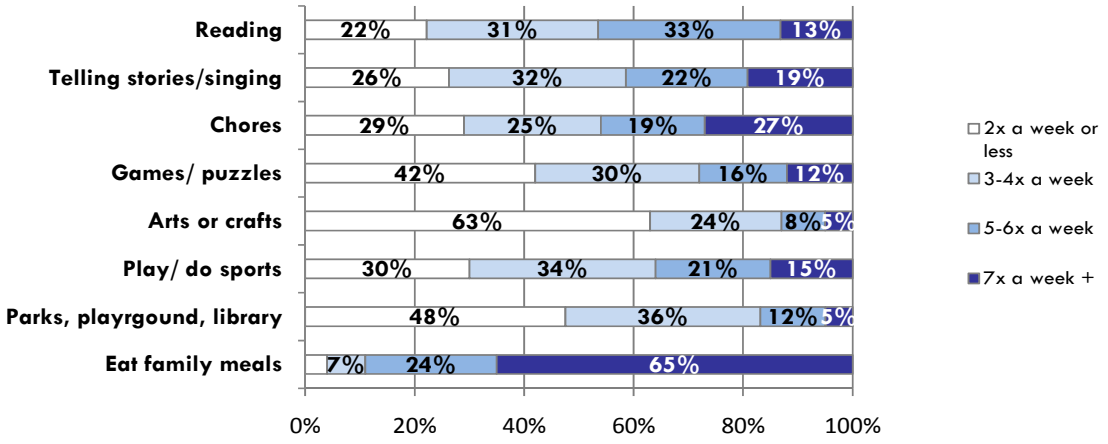
A Picture of Family Activities

To get a better picture of the activities in which families of new kindergarten students engage, the *Parent Information Form* asked parents to report how often they spent time doing a variety of activities with their child during a typical week, including:

- Reading for more than five minutes
- Telling stories or singing songs
- Involving children in household chores
- Playing games or doing puzzles
- Doing arts and crafts
- Taking children outside to play or do sports together
- Taking children out to places like the park, a playground, or the library
- Eating family meals together

Forty-six percent of families read with their children and 41 percent told stories or sang songs with them five or more times per week. Forty- six percent involved their children in chores five or more times per week. Doing arts and crafts with children and taking them to a park, playground, or library were less common; most parents did these things twice a week or less.

Figure 28. Frequency of Family Activities



Source: Parent Information Form (2009)

Note: Percentages are based on between 473-474 families. Percentages may not sum to 100 due to rounding. Findings less than 5% are not labeled.

Amount of "Screen Time"

The American Academy of Pediatrics (AAP) recommends that young children watch no more than two hours of television per day. To determine how much television children were watching – and more generally, how much overall "screen time" exposure they had – parents were asked to report the amount of time their child spent watching televisions or videos or paying video or computer games. They also reported how much of this time was spent on learning activities.

On average, children in this assessment spent two hours and 7 minutes per day on "screen time" activities. Thirty nine percent of the children were spending more than the recommended two hours per day, according to parent reports.

Figure 29. Overall Screen Time Spent by Children per Day

Screen time	Percent
0 – ½ hour	7%
More than ½ - 1 hour	14%
More than 1 - 1½ hours	18%
More than 1½ hours - 2 hours	24%
More than 2 hours - 3 hours	25%
More than 3 hours - 4 hours	10%
More than 4 hours	4%

Source: Parent Information Form (2009)

Note: Sample size = 430. Percentages may not sum to 100 due to rounding.

Use of Local Family Resources

Parents were also asked to indicate whether they had ever used any of six local family resources, including local parks; libraries; recreational activities, camps and sports; local museums; community clinics; art/music programs, or anything else. Local parks and libraries were the most likely to have been used by families (70% and 61%, respectively). However, few families had used the other local resources. About one-third had engaged in recreational activities, camps, and sports; 19 percent used a community clinic, and 15 percent had been to local museums. Seven percent had been involved in an arts or music program. Families had, on average, used 2.08 family resources.

Figure 30. Local Family Resources Used

Local resources	Percent
Local parks	70%
Libraries	61%
Recreational activities, camps, and sports	33%
Community clinic	19%
Local museums	15%
Arts/ music program	7%
Other	3%
None of the above	13%

Source: Parent Information Form (2009)

Note: Sample size = 444.

Use of Parenting Programs, Services and Supports

The *Parent Information Form* included a list of nine programs, services, and supports for families with children; parents were asked to indicate which they had used. On average, parents had used just over two of the supports (mean = 2.28). The most commonly used was regular medical check-ups while pregnant; however, while this is recommended for all pregnant women, only fifty-seven percent of women in this sample reported having received such check-ups. More than half of families (55%) had received assistance from WIC (Women, Infants, Children). Twelve percent of the families had accessed none of the parenting supports listed.

Figure 31. Receipt of Parenting Programs, Services and Supports

Parenting programs, services and supports	Percent
Regular medical check-ups while pregnant	57%
WIC	55%
Help from extended family	35%
Help from neighbors and/or friends	20%
Information from your child's child care provider	23%
Parent education classes	16%
Information or programs at your church/ religious organization	9%
Home visits from a nurse, community worker, or other provider	8%
Parent support groups	4%
None of the above	12%

Source: Parent Information Form (2009)

Note: Sample size = 446.

Social Support and Coping with Parenting

The *Parent Information Form* included a set of questions to assess parents' perceptions of being supported in their parenting and having social resources to parent effectively. Parents were asked if:

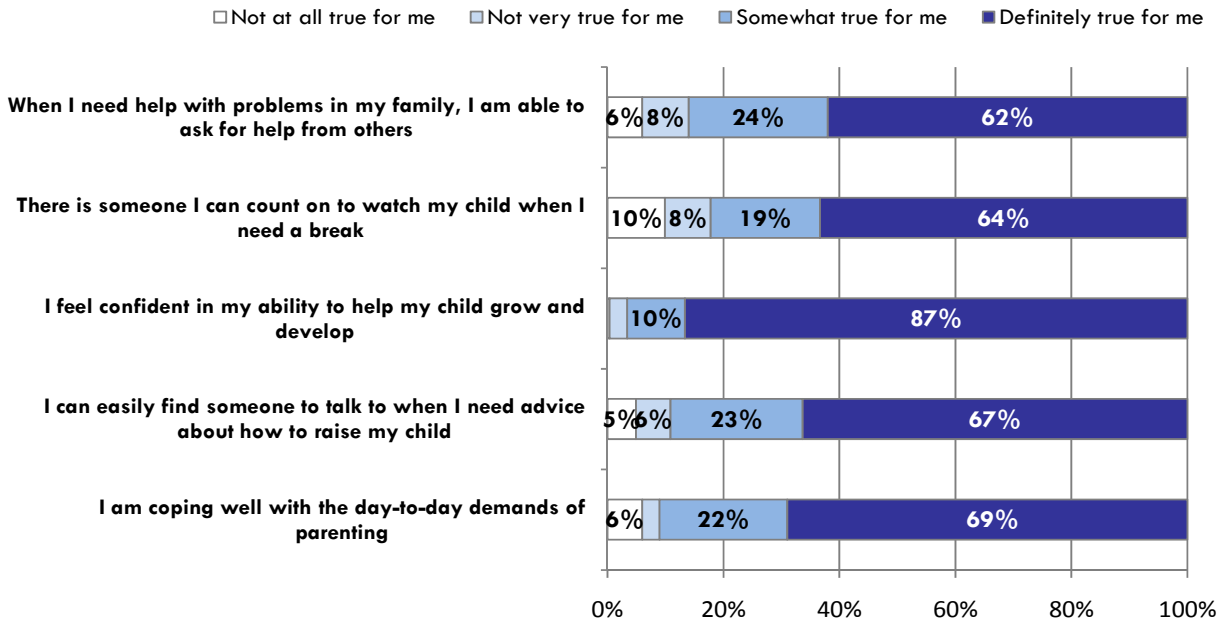
- They could ask for help from others when they had problems in their family
- There was someone they could count on to watch their child when they needed a break
- They felt confident in their ability to help their child grow and develop
- They could easily find someone to talk to when they needed advice about how to raise their child
- They were coping well with the day-to-day demands of parenting

Figure 32 shows that parents felt very confident in their ability to help their child grow and develop, and between 62 and 69 percent of parents felt that they were coping well and could definitely find support from others with parenting and family issues.

The biggest need among parents was having someone who would watch their child when they needed a break, with about one in six saying this was "not very" or "not at all" true for them.

A composite measure of parent's levels of support and coping was created (alpha = .73), and parents' average level of coping and support across the four items was examined. Parent-reported average support and coping levels were high – the average score was 3.54 on a scale of 1 to 4.

Figure 32. Parents' Perceptions of Parenting Confidence, Social Support, and Coping



Source: Parent Information Form (2009).

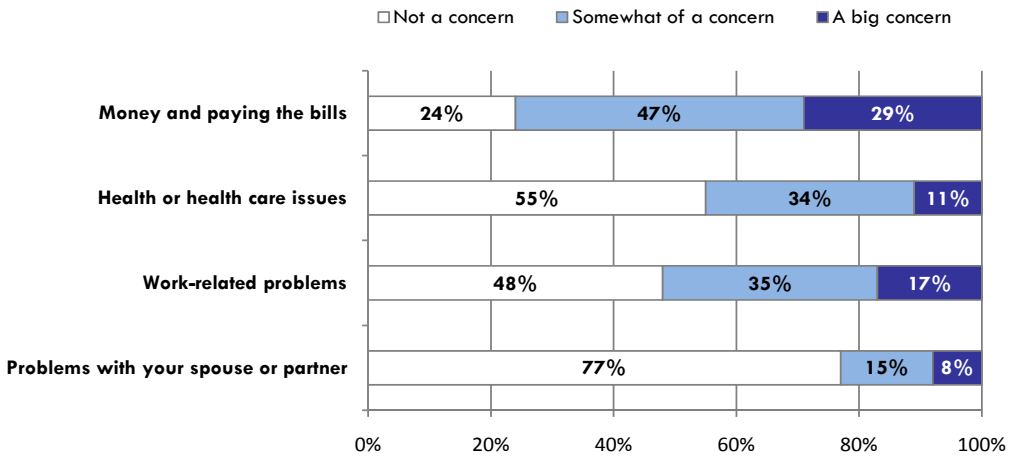
Note: Sample sizes are as follows (from top to bottom): 447, 448, 445, 449, 417. Percentages may not sum to 100 due to rounding. Findings less than 5% are not labeled.

Potential Sources of Stress

A set of four questions answered by parents assessed the degree to which they were facing challenging family circumstances. The majority of parents who responded reported at least some concern over money and paying the bills; more than one in four (29%) felt this was "A big concern."

About half of families reported that work issues or health/healthcare issues were at least somewhat of a concern. Fewer families (23%) felt some level of concern about problems with their spouse or partner.

Figure 33. Parent Reports of Life Concerns



Source: Parent Information Form (2009).

Note: Sample sizes are as follows (from top to bottom): 450, 442, 435, 438.

How Did the 2008 and 2009 Samples Compare?

As the following figure shows, there were small sample differences in 2008 versus 2009 in terms of the make-up of the student sample. The 2009 sample had somewhat fewer girls than were included in 2008, but the average age of students was similar, as was the percentage of students with identified special needs. More Asian and African American students – and fewer Hispanic/Latino and Caucasian students – were in the 2009 sample than in the 2008 sample; the differences in 2008 versus 2009 primary languages mirrors these shifts in ethnicities. There were slightly fewer English Learners in the 2009 sample than in the 2008 sample as well.

Figure 34. Comparing 2008 and 2009 Samples on Key Child Variables

Child variables	Percent in 2008	Percent in 2009
Sex (% girls)	52%	46%
Average age	5.34	5.35
Has special needs	11%	12%
Race/ ethnicity		
Hispanic/Latino	56%	52%
Asian	13%	16%
Caucasian	15%	11%
African American	8%	11%
Pacific Islander	2%	3%
Alaskan Native or American Indian	<1%	<1%
Multi-racial	6%	6%
Other	<1%	<1%
English Learners	63%	60%
Primary language		
Spanish	49%	47%
English	36%	38%
Chinese/ Mandarin/ Cantonese	6%	5%
Filipino/ Tagalog	3%	3%
Vietnamese	2%	2%
Farsi or Dari	1%	<1%
Korean	0%	0%
Other language	4%	3%
(Teacher chose both Spanish & English)	0%	1%

Source: Kindergarten Observation Form I (2008, 2009).

Note: Special needs in 2008 and 2009 were calculated slightly differently, and are thus not perfectly comparable as above. Specifically in 2009, a more conservative approach was taken, such that if the only source of information indicating special needs was parents' own assessment/diagnosis, the child was not included in the special needs group. The 2009 special needs rate would have been higher – 14% of students – using the calculation method from 2008. For 2008 data, sample sizes range from 559-581. For 2009 data, sample sizes range from 509-521.

Figure 35 compares the 2008 and 2009 samples on several key family variables. The two samples were similar in terms of maternal education levels and percentages of single parents and children born to teen mothers. However, there were large differences between 2008 and 2009 samples on income. Perhaps reflecting the current economic conditions, there was a substantially larger percentage of children in 2009 who had a parent who had lost a job in the last year. Perhaps because of this, fewer children in 2009 had private health insurance – and more were on Medi-Cal – than in the 2008 sample.

Figure 35. Comparing 2008 and 2009 Samples on Key Family Variables

Family variables	Percent in 2008	Percent in 2009
Mother not educated beyond high school	53%	55%
Family earns less than $35,000 per year	51%	62%
Type of insurance		
Private insurance	46%	42%
Medi-Cal	39%	46%
Healthy Families	10%	10%
Both Medi-Cal and Health Families	2%	0%
Child has no health insurance	3%	3%
Teen mother when child was born	9%	10%
Single parent	23%	25%
Parent lost job in the last year	23%	39%

Source: Kindergarten Observation Form I and Parent Information Form (2008, 2009).

Note: For 2008 data, sample sizes range from 422-516. For 2009 data, sample sizes range from 349-461.

Section Summary

Children in the assessment were on average about five years and four months old when they began kindergarten. Just over half were from Hispanic/ Latino backgrounds, and six out of ten students were English Learners. About 12 percent of children had identified special needs at the time of kindergarten entry, and the most common special needs mentioned was problems with speech and language.

Eighteen percent of the sample had mothers who had not graduated from high school, and incomes were generally somewhat low, with 62 percent of households earning less than $35,000 per year. One in ten students (10%) had been born to a teen mother. Twenty-five percent lived in a single-parent household, and 39 percent had a parent who had lost a job in the past year.

Thirteen percent of parents reported reading with their children an average of once a day or more, and 61 percent of children were within the AAP-recommended guidelines for daily screen time, spending an average of two hours or less per day in front of a computer or television. Parents had accessed an average of 2.28 of a list of nine parenting supports and services. Generally, parents reported good levels of coping and social support for their parenting needs. However, money and paying the bills was reported to be a concern for more than three out of four parents, and 29 percent reported this was a big concern for them.

Preschool and Other Early Care Experiences

Section Overview

How many children were exposed to preschool prior to kindergarten? What other types of early care experiences did children have? Parents and teachers both provided information about each child's care in the year before entry into kindergarten. This section summarizes children's experiences in different early care environments prior to entering kindergarten.

Types of Early Care Experiences

As the figure shows, more than half of children (57%) had a stay-at-home parent who cared for them during the year prior to kindergarten. Seventeen percent were cared for regularly by a relative or neighbor, four percent by a babysitter or nanny, and five percent had attended a family child care home.

Data regarding preschool experience was represented using a combination of parent-reported and teacher-reported information. By combining these two data sources, it was determined that 51 percent of students in the assessment had attended a licensed preschool or childcare center, including Head Start, State Preschool, or private program.[4]

Figure 36. Students' Early Care Experiences

Type of Child Care Arrangements in the Year Prior to Kindergarten	Percent of students
Stay-at-home parent who took care of child most of the time	57%
Relative or neighbor	17%
Babysitter or nanny	4%
Licensed care in someone's home	5%
Licensed preschool or childcare center (e.g., Head Start, State Preschool, private)	51%

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

Note: Percentages are based on the following sample sizes: 483, 483, 483, 483, and 498.

In addition, 15 percent of students attended a short-term summer pre-K program sponsored by F5AC, and six percent of students attended a different summer pre-K program.

[4] More information about the calculation of preschool rates is included in Appendix 6. The percentage of students attending one of these preschool types was calculated without including 23 students for whom preschool attendance (or non-attendance) could not be determined. Some calculations of preschool rates assume that any student whose status cannot be verified becomes part of the "no preschool" group of students. Using this calculation method, the preschool attendance rate would be 49%.

Figure 37. Attendance at a Summer Pre-K Program

Attended Summer Pre-K	Percent
F5AC Summer Pre-K	15%
Summer Pre-K that was not F5AC	6%

Source: Kindergarten Observation Form I(2009) and ECChange database.

Note: Sample sizes are as follows: 521 and 252 respectively. Children were counted as attending F5AC's Summer Pre-K if they were able to be matched to F5AC database records.

Amount of Time Spent and Languages Spoken

How much time were children spending in these early care settings in the year prior to kindergarten? Children who were cared for by a relative or neighbor and children who attended licensed care in someone's home tended to be fairly evenly split between those who spent more than 30 hours per week with them and those who spent 20 or fewer hours per week with them. More than half of those cared for by a babysitter or nanny were with them 20 hours or less weekly. Forty-two percent of preschoolers spent 30 hours a week there, and 39 percent were there for 20 or fewer hours a week.

Figure 38. Students' Weekly Hours in Different Early Care Settings

Type of Child Care Arrangements	Percent spending 1-20 hours per week	Percent spending 21-30 hours per week	Percent spending 31+ hours per week
Relative or neighbor	39%	21%	40%
Babysitter or nanny	57%	14%	29%
Licensed care in someone's home	39%	23%	39%
Licensed preschool or childcare center (e.g., Head Start, State Preschool, private)	39%	19%	42%

Source: Parent Information Form (2009).

Note: Percentages are based on the following sample sizes: 75, 21, 26, 134. Percentages may not add up to 100 due to rounding. Percentages may no be stable due to small sample sizes.

Parents were asked to indicate the languages spoken in the child care settings where their children spent time. English (72%) and Spanish (45%) were by far the most common languages spoken in these child care settings.

Figure 39. Languages Spoken in Children's Child Care Settings

Languages in Child Care Arrangements	Percent of students
English	72%
Spanish	45%
Chinese/ Cantonese/ Mandarin	5%
Filipino	6%
Vietnamese	3%
Farsi or Dari	<1%
Korean	0%
Other	2%

Source: Parent Information Form (2009).

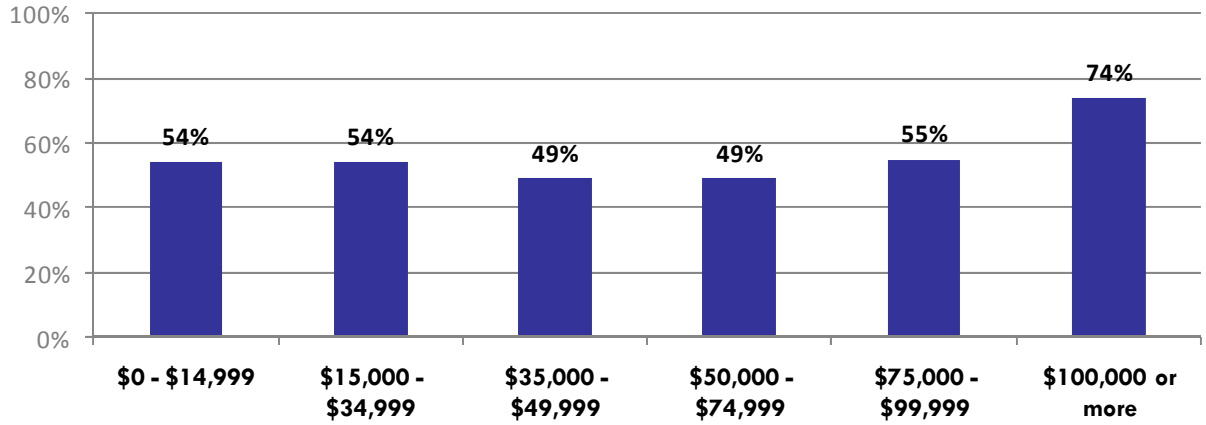
Note: Sample size = 448. Percentages sum to more than 100 because respondents could check more than one language.

Who Attends Preschool?

Preschool attendance has been shown in countless studies to be strongly related to enhanced school readiness skills. Among children in this sample, 51 percent of children had attended a licensed preschool or childcare center, including Head Start, State Preschool, or private program. Who are the children in Alameda County who are being exposed to these preschool settings? In this section, various child and family background factors are examined to see what groups of children are more likely to have attended one of these preschool types.

The figure that follows breaks down preschool attendance as a function of families' household income. As the figure shows, there is a general trend showing that as income increases, so does attendance at a licensed preschool or childcare center. One notable exception – which has been mirrored in several recent regional datasets as well – shows a slight dip in these preschool rates among families earning $35,000 - $75,000 per year. This may be an example of a phenomenon discussed by some ECE experts who have argued that a gap in child care coverage exists for middle-income families, such that working class families earn too much money to qualify for child care subsidies, but still cannot afford to enroll their children in preschool on their own salaries.

Figure 40. Licensed Preschool or Childcare Center Attendance (Head Start, State Preschool or Private Program) Attendance, by Income Level

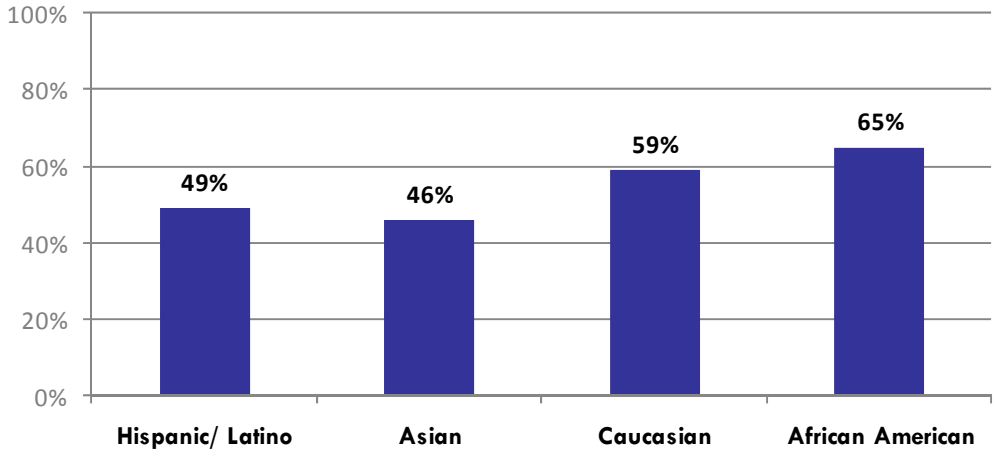


Source: Kindergarten Observation Form I and Parent Information Form (2009).

Note: Total sample size = 343. Preschool rates do not differ significantly as a function of income, according to chi-square tests.

Rates of attendance at licensed preschool or childcare centers were also examined within the four largest racial/ethnic groups in the sample. As the figure shows, Hispanic/Latino and Asian children were much less likely to have attended preschool than were Caucasian and African America children.

Figure 41. Licensed Preschool or Childcare Center Attendance (Head Start, State Preschool or Private Program) Attendance, by the Four Largest Racial/Ethnic Groups



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

Note: Percentages are based on 259 Hispanic/ Latino students, 82 Asian students, 59 Caucasian students, and 54 African American students. Overall preschool attendance rates differed marginally, according to chi-square tests ($p < .07$).

Were students with experience in these preschool settings different in any other ways from students without experience in a licensed preschool or childcare center? The figure that follows compares the composition of the preschooler and non-preschooler groups.

Several differences between the two groups are apparent. First, English Learners made up a much bigger portion of the non-preschooler group than the group who had been to preschool. In addition, 36 percent of children without preschool experience came from a family where the mother had more than a high school education, whereas 52 percent of children with preschool experience had a mother whose highest education level was beyond high school.

There were other group differences in family practices and experiences as well. Parents of preschoolers engaged in significantly more kindergarten transition activities than did parents of non-preschoolers, and they had used more parenting programs, supports, and services. Although the difference was not statistically significant, parents of children without preschool experience were somewhat more likely to have engaged in frequent reading with their child than parents of children with preschool experience. This finding is noteworthy because it is typically reversed; parents of children who have attended preschool most often report higher frequency of at-home reading than parents of children who have not attended preschool .

Figure 42. How Do Preschoolers and Non-Preschoolers Differ?

Child & Family Characteristics	Percent /average for non-preschoolers	Percent /average for preschoolers
Are 5 years or older	78%	84%
Are girls	45%	46%
Are English Learners**	67%	54%
Have special needs (parent or teacher report)	12%	12%
Mother educated beyond high school***	36%	52%
Are read to an average of once a day or more	16%	12%
Number of weekly family activities	31.37	31.91
Number of K transition activities***	3.49	4.52
Parent programs, services, supports received*	2.12	2.42
Parent social support and coping	3.54	3.54

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

Note: Sample sizes range from 211-244 for children without preschool experience and 229-254 for children with preschool experience. Significant differences according to chi-square tests or t-tests are indicated as follows: * $p < .05$; ** $p < .01$; *** $p < .001$.

How Did the 2008 and 2009 Samples Compare?

A comparison of the early care and education experiences of the 2008 and 2009 samples shows that rates of licensed care in someone's home and attendance at a licensed preschool or childcare center (including Head Start, State Preschool, and private programs) were similar across the 2008 and 2009 student samples. However, compared with children in the 2008 sample, fewer children in the 2009 sample had a stay-at-home parent, were cared for by a relative or neighbor, or were cared for by a babysitter or nanny.

Part of the reason for this may be due to the fact that the 2009 sample appeared to be somewhat less likely than the 2008 sample to split time between multiple sources of care. In particular, students in 2009 were more likely to have spent more than 30 hours per week in preschool than were 2008 students.

Figure 43. Comparing Early Care Experiences of the 2008 and 2009 Student Samples

Type of Child Care Arrangements	Percent of 2008	Percent of 2009
Stay-at-home parent who took care of child most of the time	68%	57%
Relative or neighbor	29%	17%
Babysitter or nanny	8%	4%
Licensed care in someone's home	6%	5%
Licensed preschool or childcare center (e.g., Head Start, State Preschool, private)	50%	51%
First 5 SPK program	16%	15%

Source: Kindergarten Observation Form I and Parent Information Form (2008, 2009).

Note: For 2008 data, sample sizes range from 482-583. For 2009 data, sample sizes range from 483-521.

Section Summary

Fifty-one percent of children had attended a licensed preschool or childcare center, including Head Start, State Preschool, or a private program. More than half (57%) of children had a stay-at-home parent taking care of them during the year before kindergarten, and 15 percent of students in this sample had attended the First 5-sponsored Summer Pre-K program.

Preschool attendance rates generally increased as household income increased (with a slight dip in middle-income families), and Caucasian and African American students were more likely to have attended preschool than Asian and Hispanic/Latino students. Compared to those without preschool experience, preschoolers also had more educated mothers and their parents had accessed more supports and services and engaged in more kindergarten transition activities than families of non-preschoolers.

Transitions to Kindergarten

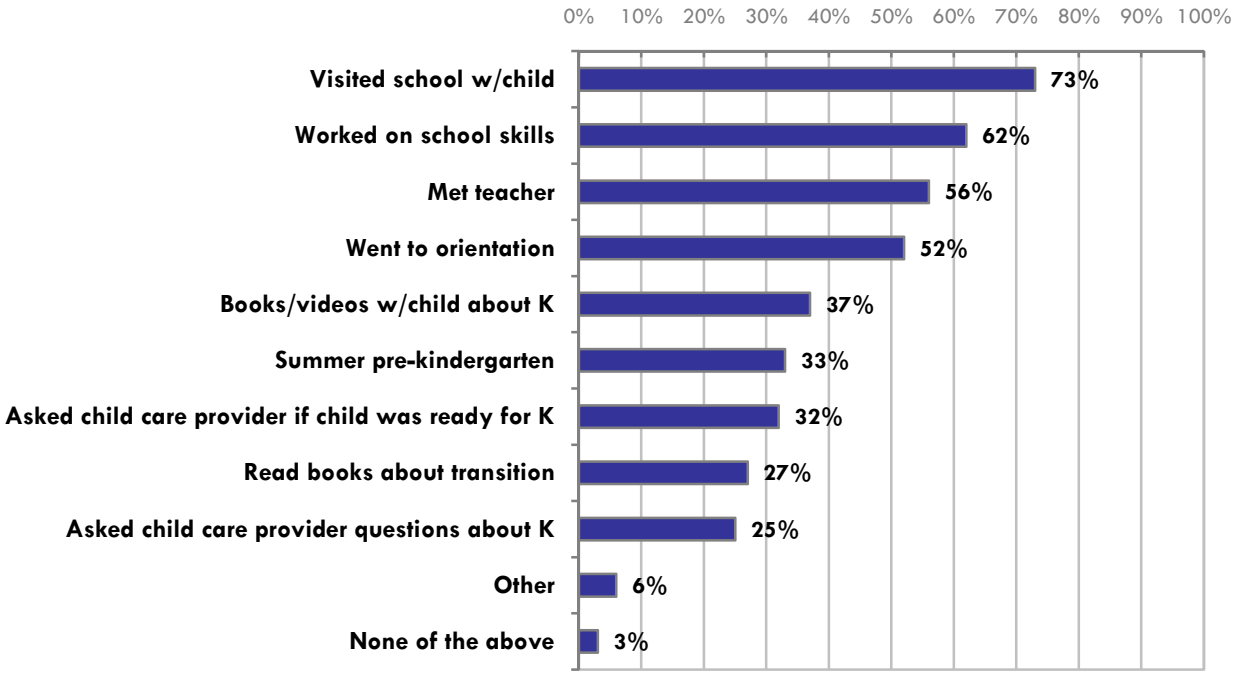
Section Overview

The *Parent Information Form* included a set of questions to determine the number and types of activities parents engaged in to assist with their child's transition into kindergarten, as well as how comfortable parents felt with their child starting school. Teachers, in turn, reported on several dimensions of the smoothness of their students' transition to school. This section reports on the efforts parents made to help their child transition to kindergarten. It also examines how parents felt about their child starting school, and what parent factors were associated with parents who did not feel comfortable with their child starting school. This section concludes with findings showing teacher reports of how children transitioned to school, and what experiences or characteristics were related to smoother transitions.

Parent Transition Activities

Almost three-fourths of parents (73%) had visited their child's school with them. Sixty-two percent had worked on children's school skills and more than half had met their kindergarten teacher (56%) or attended an orientation (52%) prior to school starting. In all, parents had engaged in about four transition activities, on average, out of ten possible (mean = 4.02).

Figure 44. Percentage of Parents Engaging in Transition Activities



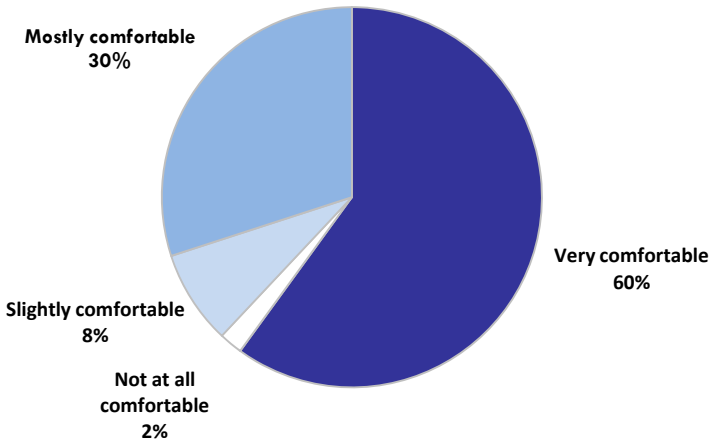
Source: Parent Information Form (2009).

Note: Percentages are based on 474 parents.

Parent Comfort with Child Starting School

Parents reported how comfortable they themselves felt with having their child start kindergarten. They were generally quite comfortable with having their child start school; 90 percent were "very" or "mostly" comfortable; only two percent were "not at all comfortable."

Figure 45. Parents' Comfort with Child Starting School



Source: Parent Information Form (2009).

Note: Percentages are based on 471 responses.

What were the characteristics of families who felt "slightly" or "not at all" comfortable with their child starting school?

Figure 46 compares the characteristics of families who felt "slightly" or "not at all" comfortable with their child starting school ("were not comfortable") and families that felt "mostly" or "very "comfortable ("were comfortable"). As the figure shows, there are a few differences between groups. Parents of children with special needs were more likely to be in the "uncomfortable" group than the "comfortable" group. When children had attended the First 5 Summer Pre-K (F5AC SPK) program, their parents were very unlikely to be uncomfortable with their child starting school; parents of F5AC SPK program participants made up only four percent of the "not comfortable" group, but represented 16 percent of the "comfortable" group. There was also a non-significant tendency for parents who were comfortable with their child starting school to report that they had engaged in more transition activities than did parents who were not comfortable.

Figure 46. Comparing Child and Family Characteristics of Those Who Were and Were Not Comfortable with their Child Starting School

Child Characteristics	Percent/average for those who were comfortable	Percent/average for those who were not comfortable
Average child age	5.34	5.39
Child is a girl	46%	43%
Child has special needs**	11%	21%
Child is an English Learner	60%	54%
Child went to preschool	52%	50%
Child went to First 5 Summer Pre-K*	16%	4%
Average number of transition activities	4.08	3.52

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

Note: The "not comfortable" group includes families who indicated they were "slightly" or "not at all" comfortable with their child starting school. The "comfortable" group includes families who indicated they were "mostly" or "very" comfortable with their child starting school. Sample sizes range from 44-47 for the "not comfortable" group and from 413-424 for the "comfortable" group. Significant group differences, according to chi-square tests are indicated as follows: * $p < .05$; ** $p < .01$.

Was their children's readiness for school (or lack of readiness) a possible reason for parents' discomfort with their child starting kindergarten? Average readiness scores on the *Basic Building Blocks* of readiness (described more fully in the next section of this report) revealed an interesting pattern of findings.

As the following figure shows, children whose parents were not comfortable with their child starting school differed significantly from their peers on only one dimension of school readiness, according to teacher reports: their *Self-Regulation* skills. (Similar but non-significant trends were observed for *Kindergarten Academics* skills as well.) Parents who were less comfortable with their child starting school had children with significantly lower readiness levels on skills such as staying focused and paying attention, comforting themselves, and controlling impulses.

Figure 47. Comparing Readiness Levels of Children Whose Parents Were and Were Not Comfortable with their Child Starting School

Readiness dimensions	Scores of children who parents were comfortable	Scores of children who parents were not comfortable
Self-Care & Motor Skills	3.59	3.60
Self-Regulation*	3.20	2.98
Social Expression	3.29	3.27
Kindergarten Academics	3.10	2.99
Overall Readiness	3.26	3.14

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

Note: The "not comfortable" group includes families who indicated they were "slightly" or "not at all" comfortable with their child starting school. The "comfortable" group includes families who indicated they were "mostly" or "very" comfortable with their child starting school. Sample sizes range from 46-47 for the "not comfortable" group and from 404-424 for the "comfortable" group. Significant group differences, according to t-tests are indicated as follows: * $p < .05$.

Smoothness of Children's Transition

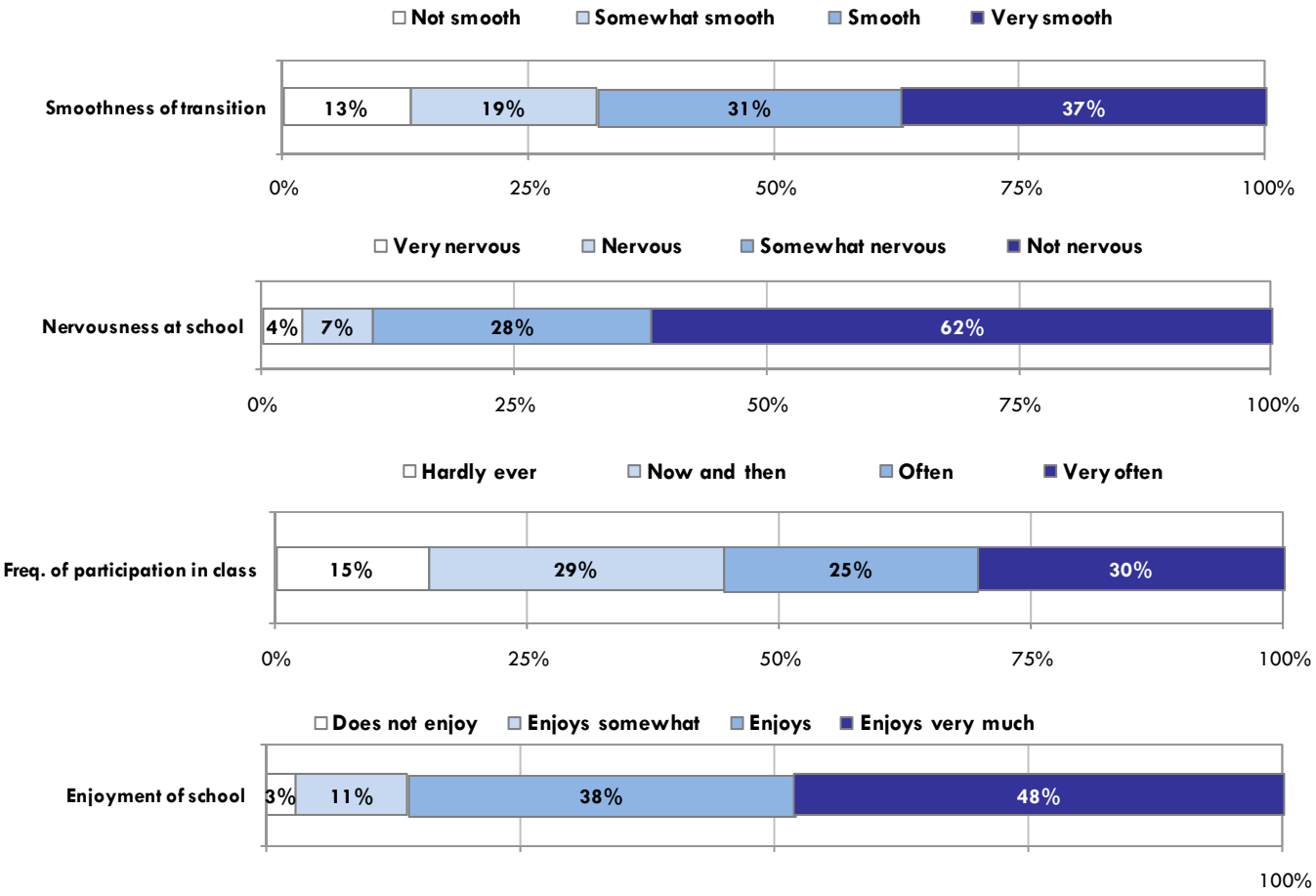
To learn more about how well children transitioned into kindergarten, teachers were asked to complete the *Kindergarten Observation Form II* once their assessment of children's skills was complete. Aside from the skills that children possessed upon kindergarten entry, these measures tapped into children's progress in adjusting to the new demands of school life. Teachers provided information on four dimensions of children's school transitions, including the following:

- The smoothness of each child's transition into school
- How nervous each child seemed at school
- How often each child participated in class discussions
- How much each child seemed to enjoy school

Results revealed that most children experienced a "smooth" or "very smooth" transition to school (31% and 37% of students, respectively). However, 13 percent did not have a smooth transition. Teachers characterized 62 percent of students as not nervous at school, with the rest showing some amount of nervousness, ranging from being "somewhat nervous" (28%) to "very nervous" (4%). Fifty-five percent of students participated "often" or "very often" at school, but some children were quiet in class; 15 percent "hardly ever" participated. Nearly half (48%) of students were seen by teachers as enjoying school "very much," and three percent were seen as not enjoying school at all.[5]

[5] Average levels of smoothness, nervousness, participation, and enjoyment of school were similar to but slightly less positive than those seen in county-wide assessments in Santa Clara County and San Mateo County in 2008.

Figure 48. Students' Transitions into Kindergarten



Source: Kindergarten Observation Form II (2009).

Note: Sample sizes are as follows (from top to bottom): 511, 511, 507, 511.

Which children experienced easier transitions to school? Figure 49 shows the correlations between several key child variables and the four transition measures; the statistically significant correlations are displayed in bold. In particular, being older, being a girl, and being proficient in English were associated with children having smoother transition experiences.

It is somewhat surprising that preschool experience was associated only with one dimensions of smoothness (participation in class); most previous assessment data have shown strong associations between preschool experience and smoother transitions across the set of all four transition measures.

Figure 49. Strength of Correlations between Various Child Characteristics and Smooth Kindergarten Transitions

Child characteristics	Smoothness	No nervousness	Participation	Enjoyment
Being older	**.19*** **	.08+	**.18*** **	**.09***
Being a girl	**.18*** **	.03	.04	**.11***
Not having special needs	.01	.05	.05	-.01
Being proficient in English	.04	**.12****	**.23*** **	.09+
Having experience at a licensed preschool or childcare center (e.g., Head Start, State Preschool, private)	.02	.01	**.12****	.01
Having First 5 Summer Pre-K experience	.04	.06	.02	.06
Family engaged in more transition activities	**.09***	.07	.10	.08+

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

Note: Sample sizes range from 486-511. Marginal/significant correlations are indicated as follows: $^{+}p < .10$; $^{*}p < .05$; $^{**}p < .01$; $^{***}p < .001$.

How Did the 2008 and 2009 Samples Compare?

The 2008 and 2009 samples showed very similar patterns in overall trends in the smoothness of their transitions to school. Across the set of four measures, there were no notable differences in the percentages of students who were or were not transitionally well, enjoying school and participating or experiencing nervousness, according to teacher reports.

What was different between 2008 and 2009, however, was the lack of a strong association between preschool experience and smooth transitions in 2009. In 2008 (as with most other readiness assessments), preschool experience was associated with greater class participation, less nervousness, and transitions that were smoother and more enjoyable for students. However, the 2009 sample of students with preschool experience were only different from their non-preschooled peers in their level of kindergarten participation; they were very similar in how smoothly they transitioned, how nervous they were, and how much they enjoyed school.

Section Summary

Most parents did a number of things to assist their child in having a smooth transition to school. The majority of parents visited the school with their child and worked on school skills with their child prior to the start of kindergarten. Nine out of ten parents were "mostly" or "very" comfortable with their child starting school. Compared to parents who were comfortable with their child starting school, parents who were not comfortable with this transition were more likely to have a child with special needs and were less likely to have had their child attend the F5AC Summer Pre-K program. These parents' discomfort may have stemmed from concerns about their child's readiness for school. A comparison of the teacher-reported student readiness levels (covered more fully in the next section) revealed that parents who were uncomfortable with their child starting school had lower *Self-Regulation* skills than children of parents who were comfortable with their child starting school.

Most children were reported to have had smooth transitions into school across a set of four transition measures. Girls, older children, and children who spoke English proficiently were generally seen as having smoother transitions. Preschool experience was associated with greater class participation, but it was not related to any other enhanced transition experiences.

School Readiness in Alameda County – 2009

Section Overview

This section describes in detail the skills that children in the assessment possessed as they entered kindergarten in Fall 2009, including the following:

- Children's readiness by the five NEGP readiness skill groups
- Readiness levels according to an alternate set of four skill groups, based on data-driven sorting of the skills
- An item-by-item summary of all 24 readiness skills, as measured by children's teachers
- Readiness in the context of different benchmarks, including teachers' expectations and a standard that predicts third grade success
- The role that children's age plays in how ready they are at kindergarten entry
- Parents' perceptions of their children's general readiness levels

Teachers used the *Kindergarten Observation Form I* to rate each of their students across a broad range of school readiness skills. On each of 24 skills, teachers rated their students' proficiency to be at one of four levels: (1) "Not yet;" (2) "Beginning;" (3) In progress;" or (4) "Proficient."

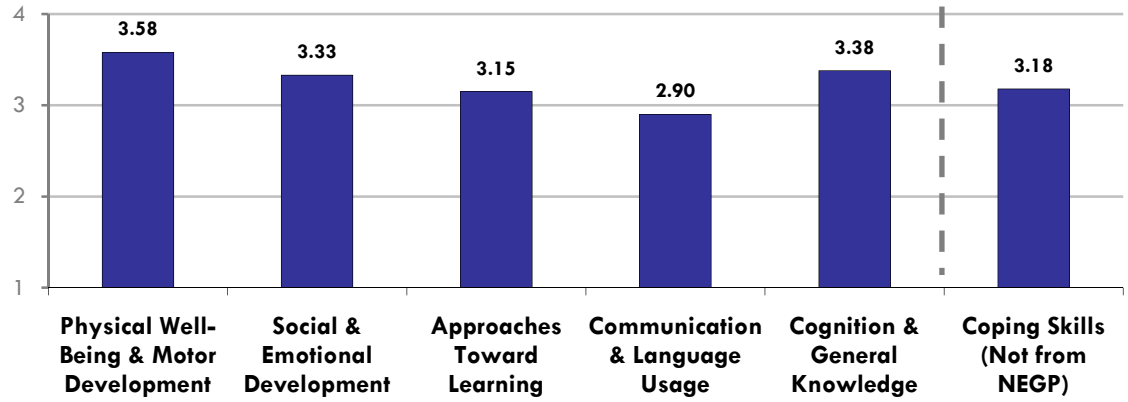
Readiness According to the NEGP

As described in the "Introduction" section of this report, the original *Kindergarten Observation Form* sorted (and reported) skills according to five NEGP categories, including:

- *Physical Well-Being & Motor Development*
- *Social & Emotional Development*
- *Approaches Toward Learning*
- *Communication & Language Usage*
- *Cognition & General Knowledge*

The figure that follows uses these NEGP readiness dimensions to examine children's readiness scores (plus a newer set of four items reflecting children's coping skills). Children's scores were the lowest on *Communication & Language Usage*; children scored the highest on *Physical Well-Being & Motor Development*.

Figure 50. Students' Proficiency across the Five NEGP Readiness Dimensions



Source: Kindergarten Observation Form I (2009).

Note: Scores are based on 364-521 students. Means can range from 1 to 4. Scale points are as follows: 1=not yet, 2=just beginning, 3=in progress, 4=proficient.

Moving from the NEGP to the Basic Building Blocks

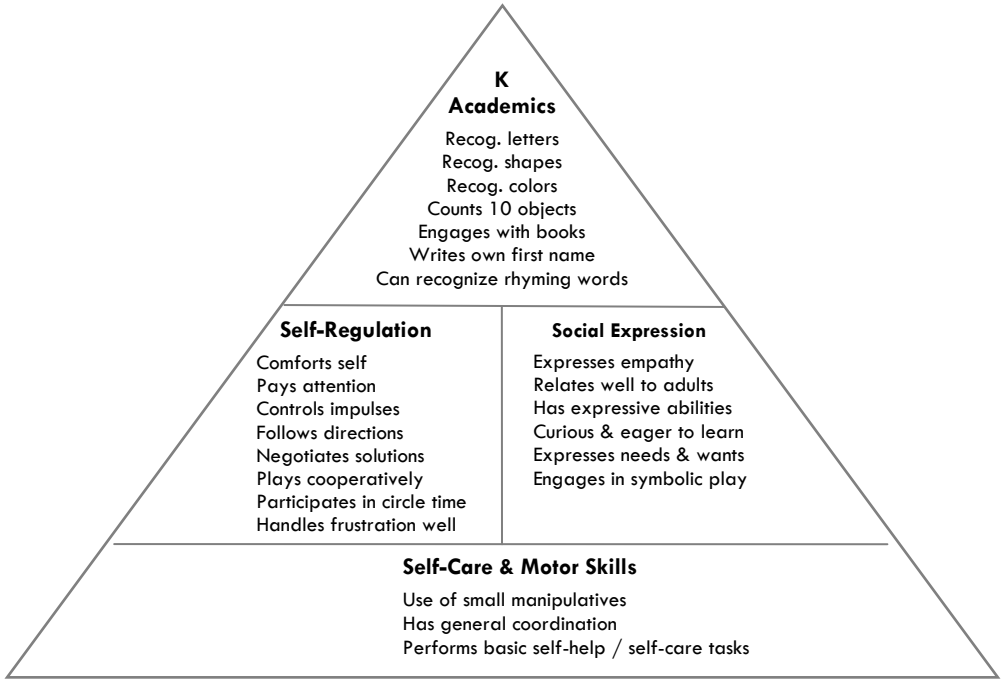
There is a strong rationale for continuing to report on readiness using the NEGP classification system; the NEGP is widely used among many researchers and school readiness experts. However, a more recent data-driven sorting of the skills – based on a statistical procedure called factor analysis that has been conducted on multiple years of assessment data – has shown that the underlying dimensions of readiness are actually better represented by four skill groups that have been labeled the *Basic Building Blocks* of readiness. This way of classifying the readiness skills has been used more recently both because it is data-driven and because it has an intuitive appeal; school readiness experts and practitioners have responded very positively to these groups and support their use to advance discussions about how to define and address school readiness issues.

The sorting of the 24 readiness skills into these four dimensions is shown in Figure 51 that follows. As the figure shows, the *Basic Building Blocks* include the following components: *Self-Care & Motor Skills, Self-Regulation, Social Expression,* and *Kindergarten Academics*. Reliability analyses conducted with data collected in this assessment again revealed strong interrelationships among the items within each *Basic Building Blocks*, with Cronbach's alpha coefficients ranging from 0.84 to 0.94:

- *Self-Care & Motor Skills*: Alpha = 0.84
- *Self-Regulation*: Alpha = 0.94
- *Social Expression*: Alpha = 0.89
- *Kindergarten Academics*: Alpha = 0.90

Notably, the *Basic Building Blocks* have been represented in the figure below and in previous assessments as a pyramid. Although we strongly believe that all the skill dimensions are essential components of readiness, the pyramid representation has been deliberately chosen to suggest a framework of skill progression. Basic skills related to taking care of oneself are the foundation, upon which rest key social-emotional component of readiness. The apex of the pyramid contains the beginnings of the more academically-oriented skills that will in turn provide children with a foundation for the content covered in kindergarten and beyond.

Figure 51. Basic Building Blocks of Readiness



A summary table on the next page provides a "crosswalking" of skills across the two different sorting methods. Each of the 24 readiness items is shown according to which of the five NEGP dimensions of readiness it sorts into, as well as in which one of the four *Basic Building Blocks* of readiness it belongs.

The NEGP *Physical Well-Being & Motor Development* category maps perfectly onto the *Basic Building Block* dimension of *Self-Care & Motor Skills*. *Approaches to Learning* skills mostly sort into the *Self-Regulation* skills in the *Basic Building Blocks* (with one skill going into *Social Expression),* whereas *Social & Emotional Development* divides evenly into the *Basic Building Blocks* categories of *Self-Regulation* and *Social Expression. Communication & Language Usage* and *Cognition & General Knowledge* largely map onto the *Kindergarten Academics* dimension, with two skills in the *Social Expression* group.

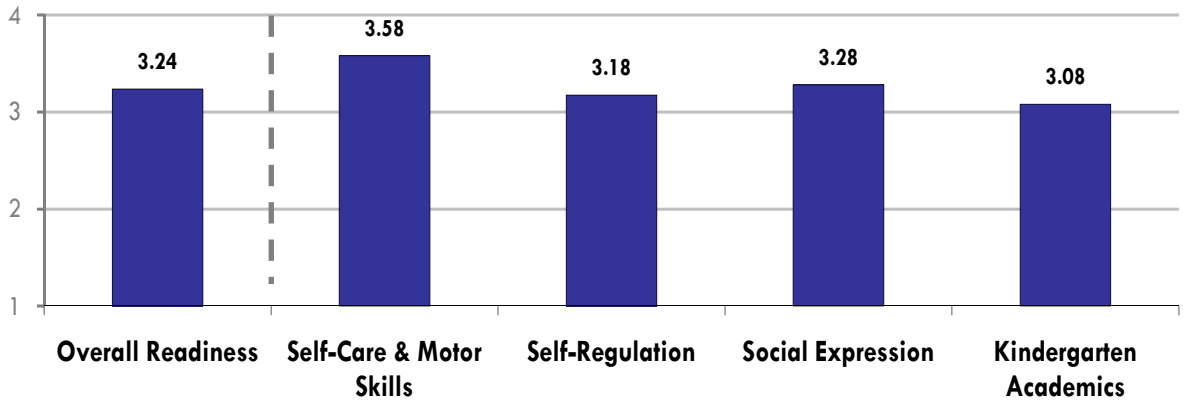
Figure 52. Crosswalking Readiness Items from NEGP to Basic Building Blocks

Skill Items	NEGP Dimensions	Basic Building Blocks
Uses small manipulatives	Phys Well-Being/Motor Dev	Self-Care & Motor Skills
Has general coordination on the playground	Phys Well-Being/Motor Dev	Self-Care & Motor Skills
Performs self-help/self-care tasks	Phys Well-Being/Motor Dev	Self-Care & Motor Skills
Relates appropriately to adults other than parent / primary caregiver	Social & Emotional Dev	Social Expression
Appropriately expresses needs and wants verbally in primary language	Social & Emotional Dev	Social Expression
Works and plays cooperatively with peers	Social & Emotional Del	Self-Regulation
Controls impulses and self-regulates	Social & Emotional Dev	Self-Regulation
Expresses curiosity and eagerness for learning	Approaches to Learning	Social Expression
Stays focused / pays attention during activities	Approaches to Learning	Self-Regulation
Follows one- to two-step directions	Approaches to Learning	Self-Regulation
Participates successfully in circle time	Approaches to Learning	Self-Regulation
Has expressive abilities	Communication & Lang	Social Expression
Recognizes the letters of the alphabet	Communication & Lang	Kindergarten Academics
Writes own name	Communication & Lang	Kindergarten Academics
Can recognize rhyming words	Communication & Lang	Kindergarten Academics
Engages with books	Communication & Lang	Kindergarten Academics
Engages in symbolic/imaginative play	Cognition & Gen'l Knowledge	Social Expression
Can count 10 objects correctly	Cognition & Gen'l Knowledge	Kindergarten Academics
Recognizes primary colors	Cognition & Gen'l Knowledge	Kindergarten Academics
Recognizes primary shapes	Cognition & Gen'l Knowledge	Kindergarten Academics
Comforts self with adult guidance	N/A	Self-Regulation
Negotiates with peers to resolve social conflicts with adult guidance	N/A	Self-Regulation
Expresses empathy or caring for others	N/A	Social Expression
Handles frustration well	N/A	Self-Regulation

Proficiency on the Basic Building Blocks

The figure that follows displays students' average scores – overall and on each of the four *Basic Building Blocks* dimensions – on a scale ranging from 1 ("Not yet") to 4 ("Proficient"). The figure shows that in 2009, students' overall readiness level was 3.24, which corresponds to a score that is well above the "In progress" level. Students' scores were highest on *Self-Care & Motor Skills,* followed by *Social Expression* and *Self-Regulation*. Students were least proficient in their *Kindergarten Academics* skills; they scored just above the "In progress" level on these skills (mean = 3.08).

Figure 53. Students' Proficiency across Four *Basic Building Blocks* of Readiness



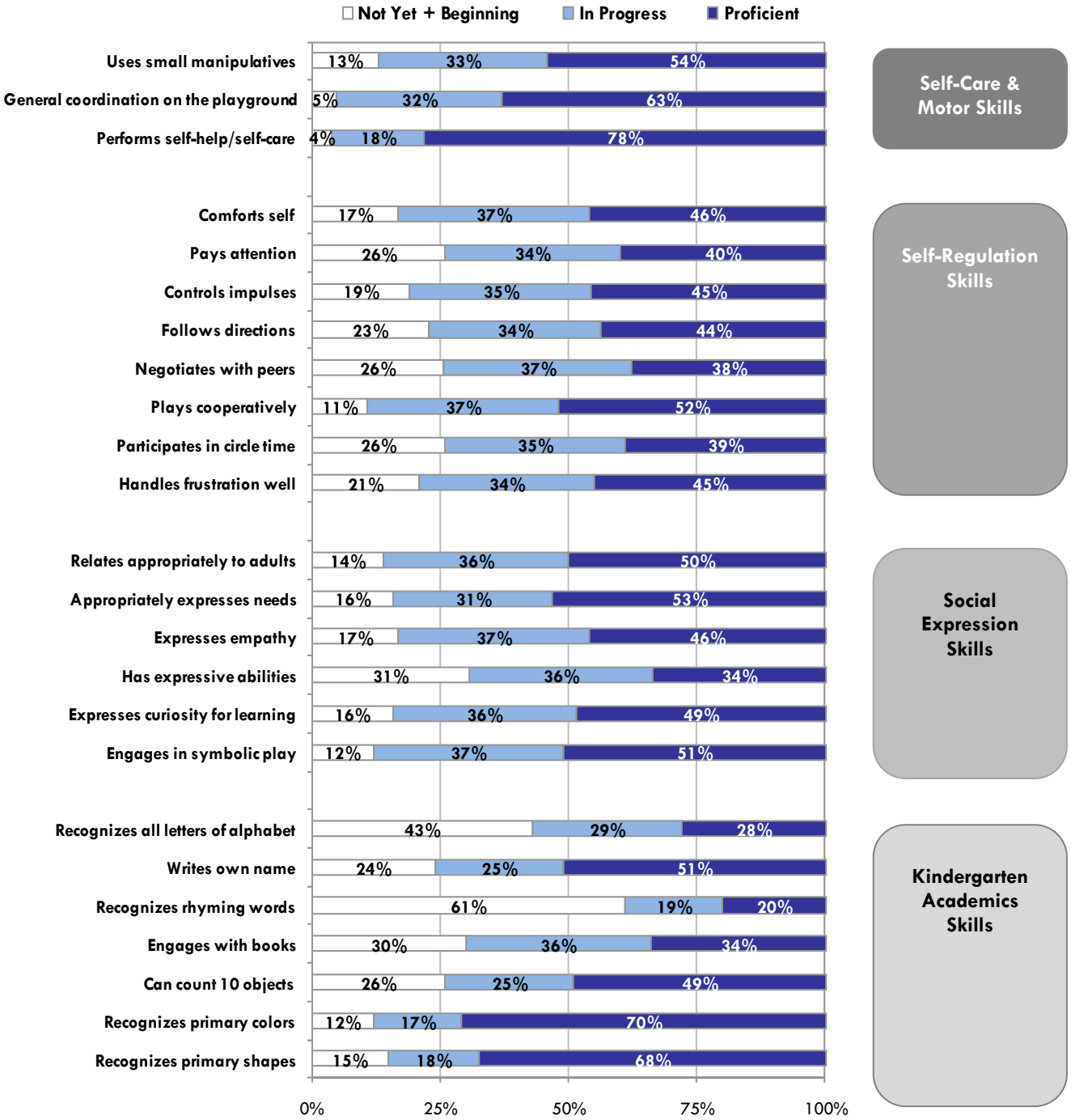
Source: Kindergarten Observation Form I (2009).

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.

Proficiency Levels for the 24 Readiness Skills

Figure 54 on the following page shows the students' readiness in greater detail; specifically, it shows the percentage of children at each level of readiness on each of the 24 readiness skills.

Figure 54. Students' Proficiency Levels Across 24 School Readiness Skills



Source: Kindergarten Observation Form I (2009).

Note: Percentages are based on 341-521 students. Don't know/ Not observed responses are not included. Percentages may not sum to 100 due to rounding.

As the figure below shows, students were most proficient on the following skills:

- Performs self-help / self-care
- General coordination on playground
- Recognizes primary colors
- Recognizes primary shapes
- Use of small manipulatives

Average scores for all of these items were well above the "In progress" level; for the most part, most students were at or close to proficiency on these skills.

Figure 55. Students' Top Five Readiness Strengths

Top five strengths	Students' average score (out of 4.00 possible)
1. Performs self-help/ self-care	3.75
2. General coordination on the playground	3.59
3. Recognizes primary colors	3.54
4. Recognizes primary shapes	3.48
5. Use of small manipulatives	3.40

Source: Kindergarten Observation Form I (2009).

Note: Means are based on 360-521 students. Don't know/ Not observed responses are not included.

In contrast, students had the greatest needs on the following five items:

- Recognizes rhyming words
- Recognizes letters of the alphabet
- Has expressive abilities
- Engages with books
- Negotiates with peers

On all of those skills but "Negotiates with peers to resolve conflicts" children's average proficiency score did not reach the "In progress" level.

Figure 56. Students' Top Five Readiness Challenges

Top five challenges	Students' average score (out of 4.00 possible)
1. Recognizes rhyming words	2.16
2. Recognizes letters of the alphabet	2.70
3. Has expressive abilities	2.94
4. Engages with books	2.99
5. Negotiates with peers to resolve conflicts	3.04

Source: Kindergarten Observation Form I (2009).

Note: Means are based on 341-494 students. Don't know/ Not observed responses are not included.

Providing a Context for Understanding Children's Readiness Levels

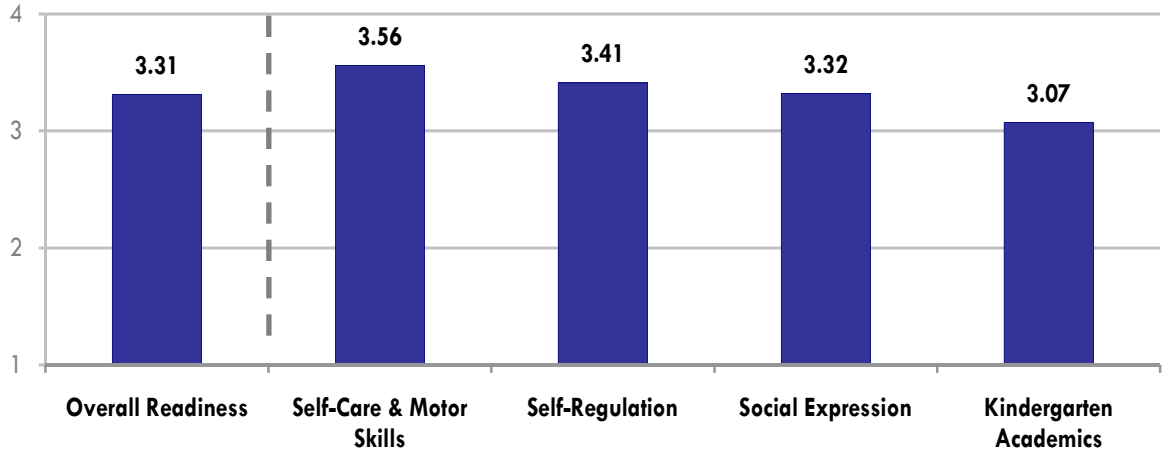
Knowing where children's skill levels lay is informative, but without additional information about where those skills should be, our ability to understand their readiness is limited. This section discusses the readiness levels of students in the assessment using two different benchmarks: (1) teachers' beliefs about how ready students should be to have a successful transition to kindergarten; and (2) average levels of readiness observed at kindergarten entry among children who later scored highly on their third grade standardized test scores.

Readiness in the Context of Teachers' Desired Proficiency Levels

An important component of the Fall 2009 school readiness assessment in Alameda County involved getting feedback from participating teachers to help contextualize the readiness levels observed in their entering kindergarten students. Teachers completed a form called the *Teacher Survey of the Importance of Readiness Skills* after they had completed all of their assessment measures. Part of this form included having teachers provide their opinion about the level at which children should be performing on each of the 24 skills to ensure a smooth transition into school.

The figure that follows displays average scores for teachers' desired levels of proficiency for their students as they enter kindergarten. Notably, these expectations follow the same pattern as the actual proficiency levels of children; teachers expect the highest proficiency in *Self-Care & Motor Skills*, and they expect the lowest proficiency on children's *Kindergarten Academics* skills.

Figure 57. Teachers' Desired Levels of Proficiency on the *Basic Building Blocks* of Readiness

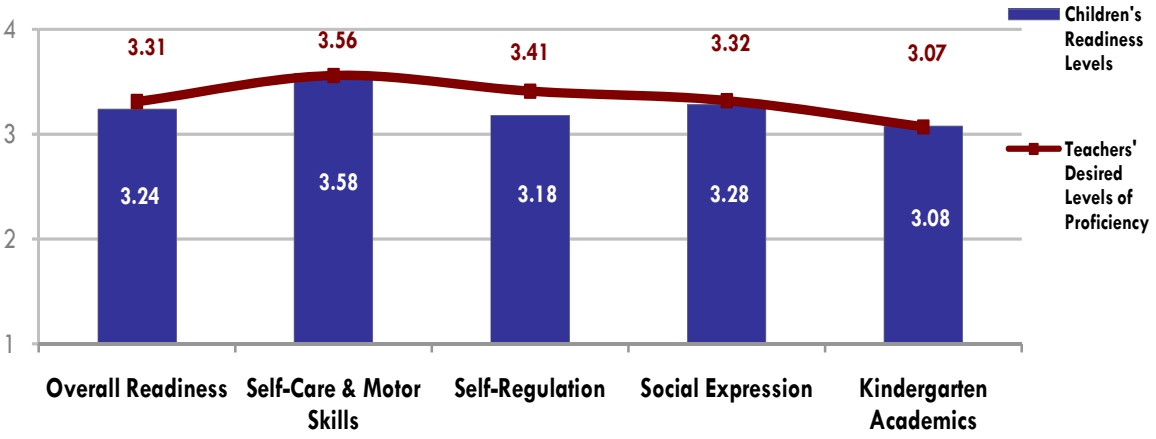


Source: Teacher Survey of the Importance of Readiness Skills (2009).

Note: Scores are based on 30 teachers.

The following figure maps students' observed skill levels on the *Basic Building Blocks* against their teachers' expectations about what their desired proficiency levels should be. As the figure shows, children's scores are generally close to what their teachers think they should be. Children's skill levels are on average slightly higher than their teachers' expectations for *Self-Care & Motor Skills*. Children's skills are just about on par with teachers' *Kindergarten Academics* expectations, and they are just below teachers' average expectations on *Social Expression* skills. For *Self-Regulation*, however, there is a larger gap in children's skills; children's average skill levels on this readiness dimension are quite a bit lower than where their teachers think they should be to ensure school success. Combining all skills together, children's readiness levels are slightly lower than their teachers' overall desired level of proficiency.

Figure 58. Putting It All Together – Students' Skill Levels in the Context of Teachers' Desired Proficiencies

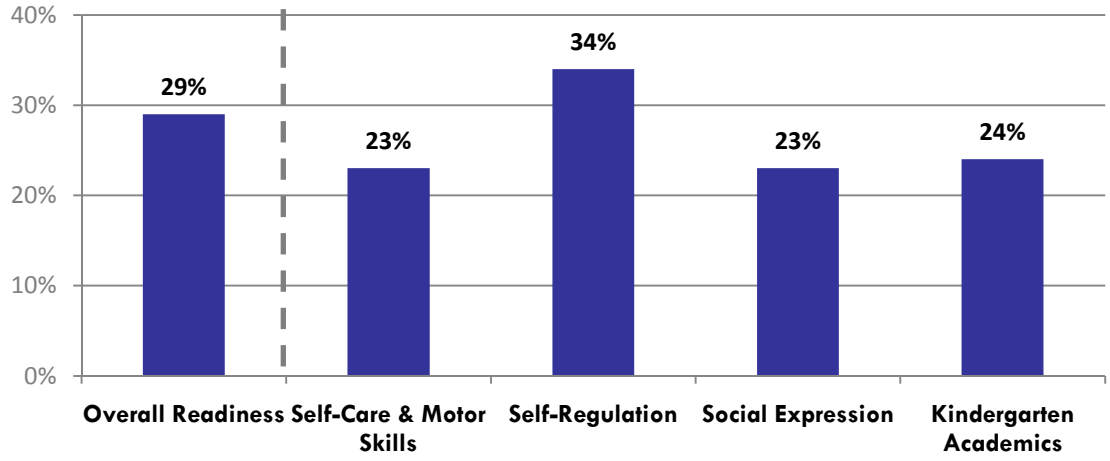


Source: Kindergarten Observation Form I (2009) and Teacher Survey of the Importance of Readiness Skills (2009).

Note: Scores are based on 498-521 students and 30 teachers.

Another way of contextualizing children's readiness is to determine how many children were performing far below their teacher's desired proficiency levels. To compute this, children were flagged if their readiness score in each *Basic Building Block* was more than one standard deviation below teachers' desired proficiency levels. This pulls out only those students whose performance was much lower than what teachers think it needs to be in order to be successful in school. The figure that follows shows the percentage of students performing far below teacher expectations in each of the *Basic Building Blocks*. In *Self-Regulation* about one in three children was performing far below teacher expectations*; for Self-Care & Motor Skills, Social Expression, and Kindergarten Academics*, it was just under one in four children. Taken as a whole, 29 percent of students had skill levels that were far below what teachers thought they should be.

Figure 59. Percent of Children Significantly Below Teachers' Proficiency Expectations



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

Note: Means are based on 498-521 students.

The "Longitudinal Study Standard" of School Readiness

In addition to these teacher-calibrated standards of readiness, ASR also has developed a standard that is based not on teacher perceptions, but on the actual kindergarten readiness levels of children who went on to be academically successful in third grade. This standard is dubbed the **Longitudinal Study Standard** because the data come from ASR's recent analysis of non-experimental, longitudinal readiness and achievement data of children who had participated in the kindergarten readiness assessments in San Mateo County in 2001-2003.[6] Linking the kindergarten readiness scores of these children to their third-grade STAR test scores showed strong connections between children's kindergarten readiness and their later academic success.

To create the Longitudinal Study Standard, third-grade children who scored at the *Proficient* or *Advanced* levels on their English Language Arts and Mathematics STAR tests were first identified. The average kindergarten readiness scores for this group of academically successful

[6] The full report entitled *Does Readiness Matter? How Kindergarten Readiness Translates Into Academic Success* can be downloaded from www.appliedsurveyresearch.org.

children were calculated, and these average readiness scores were used as the benchmark defining "kindergarten readiness of children who went on to academic success in third grade." It should be noted that this standard has not been verified for children in Alameda County, and that many children who did not meet or exceed this standard still went on to achieve success in third grade. The standard is merely offered as a loose reference point for defining how many children may be "at risk" based on their skills at entry into kindergarten.

The average readiness scores that serve as the longitudinal benchmark for each readiness dimension are shown in the figure that follows.

Figure 60. Mean Readiness Scores for Students Who Went on to Be Successful at Third Grade

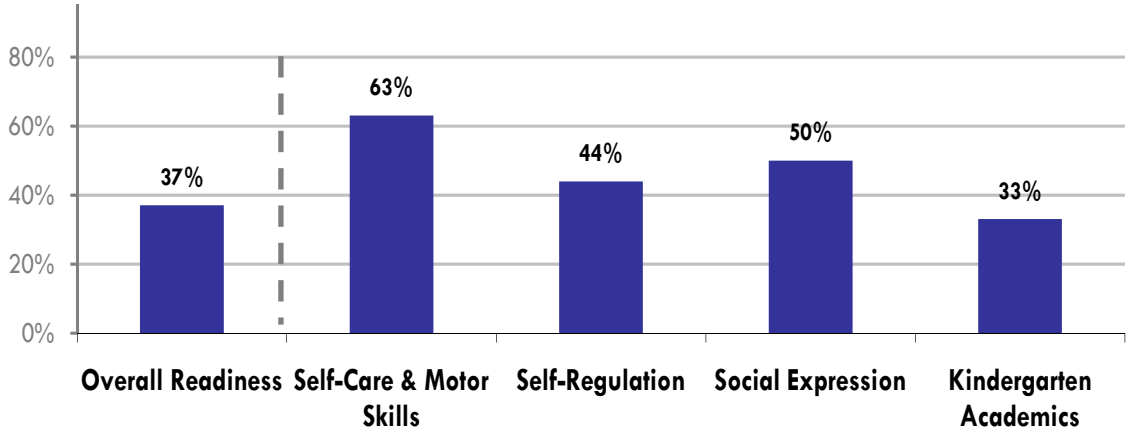
Basic Building Blocks	Longitudinal Study Standard
Overall Readiness	3.53
Self-Care & Motor Skills	3.66
Self-Regulation	3.42
Social Expression	3.49
Kindergarten Academics	3.52

Source: ASR Longitudinal Study 2008.

Note: The Longitudinal Study Standard is based on the kindergarten readiness scores of 277 children (of a possible 719 children) who: (a) participated in the 2001, 2002, or 2003 readiness assessments in San Mateo County, and (b) scored at the *Proficient* or *Advanced* levels on both their English and Math STAR tests in third grade.

Figure 61 shows the percentage of children who met or exceeded the Longitudinal Study Standard. Thirty-seven percent of incoming kindergarten students that were at or above the average kindergarten readiness levels of a group of students who went on to be academically successful at third grade. A large proportion of children met the Longitudinal Study Standard in *Self-Care & Motor Skills.* Exactly half met or exceeded the standard in *Social Expression*, and less than half met or exceeded the standards in *Self-Regulation* and *Kindergarten Academics* dimensions.

Figure 61. Percentage of Children Meeting or Exceeding the "Longitudinal Study Standard"



Source: Kindergarten Observation Form I (2009).

Note: Percentages are based 498-521 students.

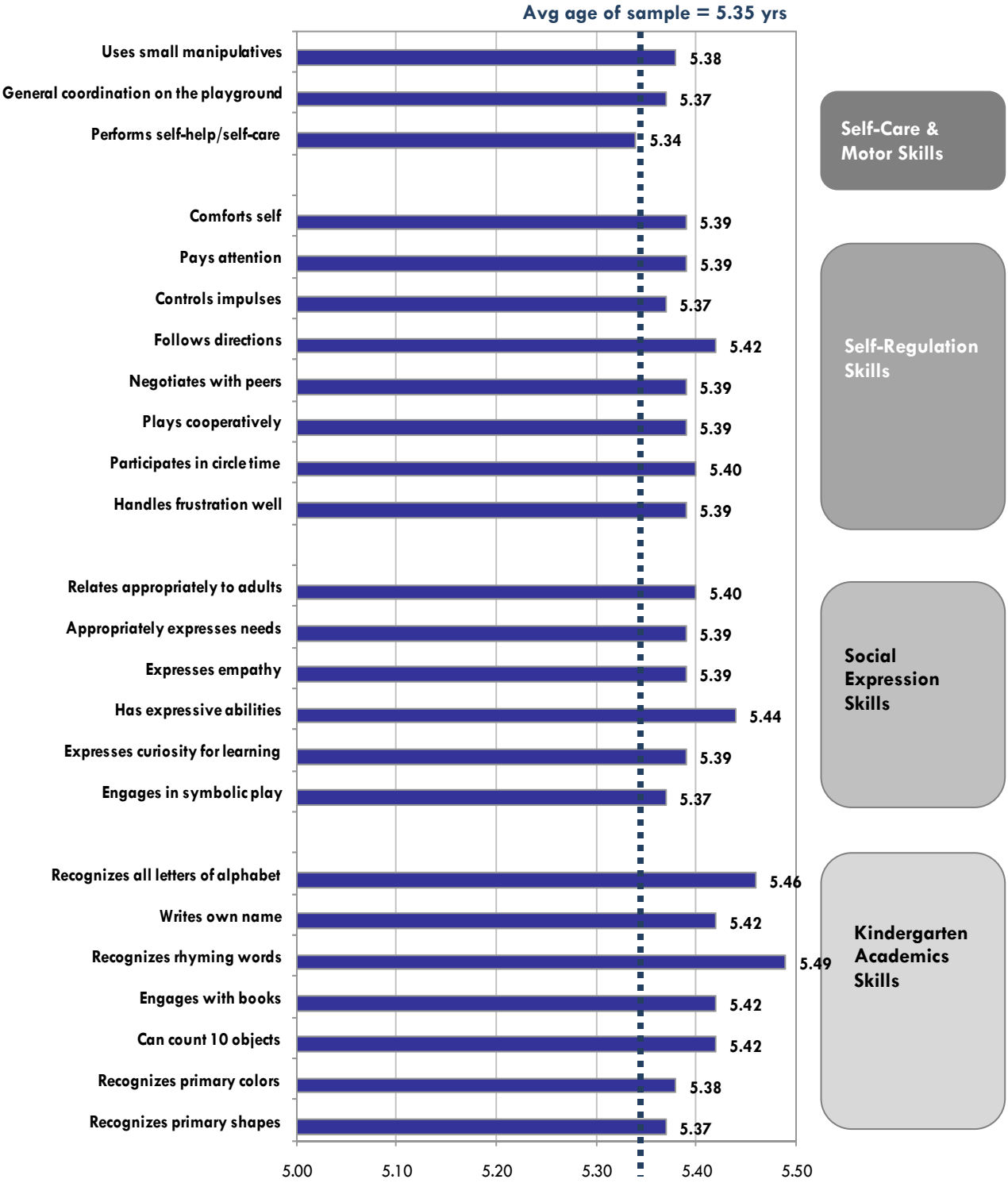
A Closer Look at Associations between Children's Age and Their Readiness

All measurements of students' readiness at kindergarten entry show that age is a strong predictor of school readiness; older children tend to be more advanced in their readiness skills than younger children. This section explores the relationship between children's age and their readiness levels in greater detail, with particular focus on the school readiness implications of California's current kindergarten cut-off age.

What is the average age of students who have reached proficiency?

The average age of students who were rated as "proficient" on each of the 24 readiness skills was calculated and is shown in Figure 62. Recall that the average age of student in the assessment was 5.35 years; as the figure shows, the average age of those proficient in each readiness skill did not deviate very much from this sample average. In fact, for all but three skills, the average age of those proficient was within one month of the age of the sample overall. Recognition of rhyming words – considered a "stretch" skill for children in this age group, was the skill that had highest average age of students who were proficient in it – they were almost 5 and one half years old, on average, or slightly less than two months older than the average age of the sample as a whole.

Figure 62. Average Age of Students Who Were Rated as "Proficient" on Each Readiness Skill



Source: Kindergarten Observation Form I (2009).

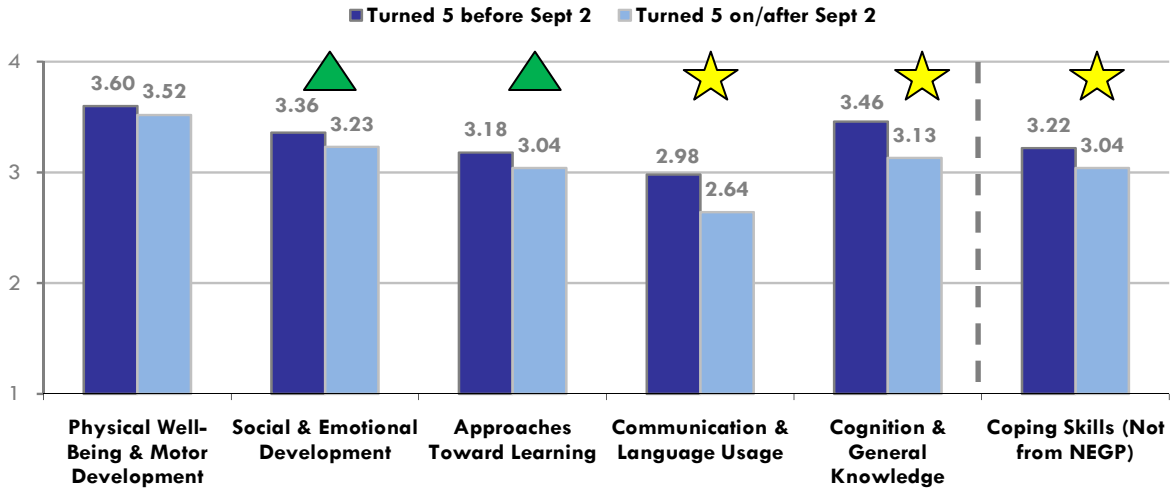
Note: Means are based on 67-407 students who were rated as "Proficient" on the individual skills.

How do readiness levels compare for children turning 5 after other states' kindergarten cutoff date of September 2?

In California, children must reach their fifth birthday by December 2 to enter kindergarten in that school year. This cut-off date is one of the latest kindergarten entry cutoff dates in the nation; the most common kindergarten cut-off date used by states is September 1. In these states, children who turn 5 on or after September 2nd may not enroll in kindergarten until the following year.

The data that follow show the implications of this policy for Alameda County students. Readiness scores by NEGP category are shown in the following figure for two groups: those who turned 5 before September 2 versus those who turned 5 on/after Sept 2. In all readiness domains except *Physical Well-Being & Motor Development,* those students who turned 5 before Sept 2 were marginally or significantly more ready for school than their younger counterparts.

Figure 63. Students' NEGP Proficiency as a Function of Children's Age

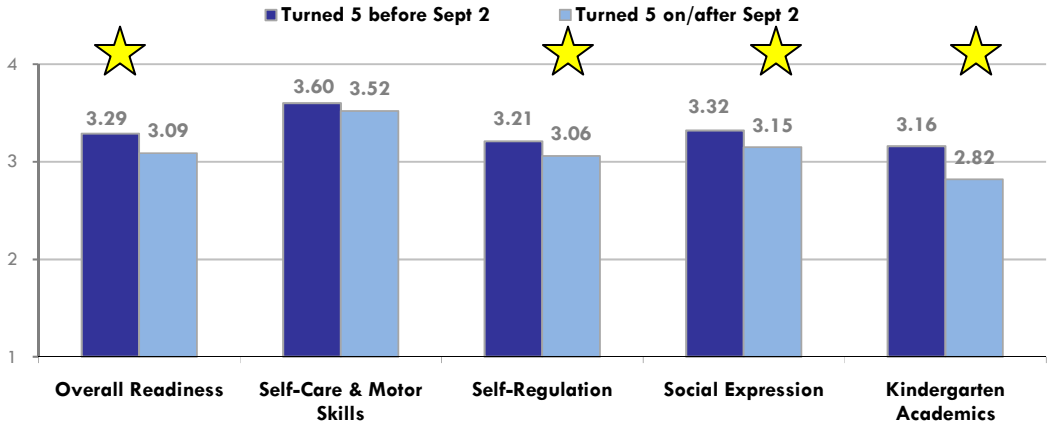


Source: Kindergarten Observation Form I (2009).

Note: Scores are based on 275-396 students turning 5 before Sept 2, and 88-124 students turning 5 on/after Sept 2. Means can range from 1 to 4. Scale points are as follows: 1=not yet, 2=just beginning, 3=in progress, 4=proficient. Yellow stars indicate significant group differences, according to t-tests ($p < .05$). Green triangles indicate marginally significant differences, according to t-tests ($p < .10$).

The same pattern holds when skills are bundled according the *Basic Building Blocks* of readiness. Children who turned 5 on/after Sept 2 scored significantly lower on all *Basic Building Blocks* except *Self-Care & Motor Skills*, with the greatest difference in *Kindergarten Academics*.

Figure 64. Students' *Basic Building Blocks* Proficiency as a Function of Children's Age



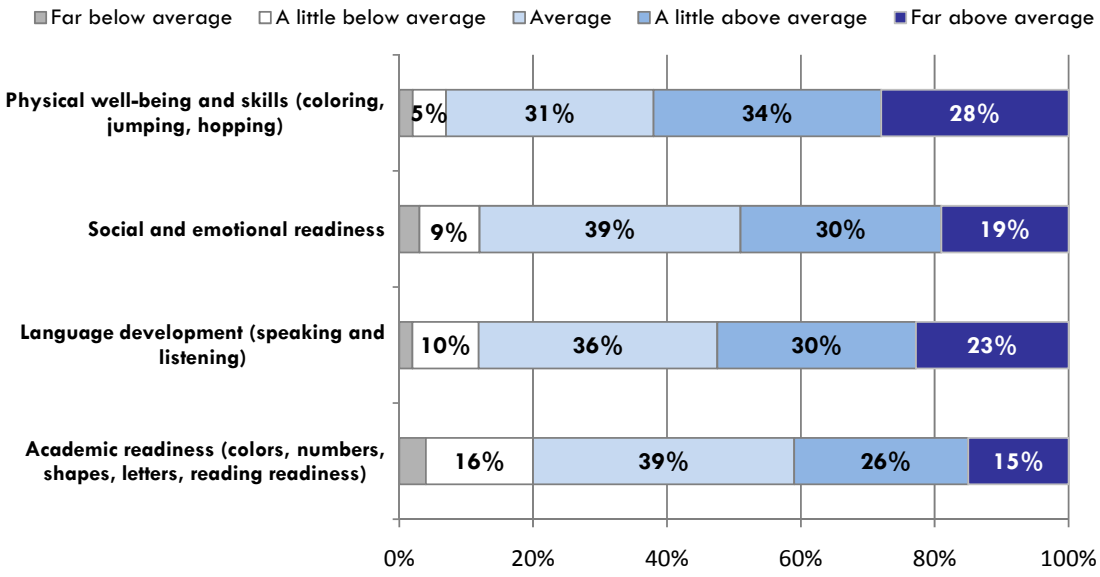
Source: Kindergarten Observation Form I (2009)

Note: Scores are based on 377-396 students turning 5 before Sept 2, and 120-124 students turning 5 on/after Sept 2. Means can range from 1 to 4. Scale points are as follows: 1=not yet, 2=just beginning, 3=in progress, 4=proficient. Yellow stars indicate significant group differences, according to t-tests ($p < .05$).

Parents' Perceptions of their Children's Readiness

How ready did parents think their children were for school? On a set of four general types of school skills, including physical, social/emotional, language, and academic skills – most parents evaluated their child's skill level as "average" or "a little above average." Parents were most likely to rate their child as being below average on academic skills; they believed their children were strongest on their physical well-being and skills.

Figure 65. Parents' Perceptions of Their Child' Readiness for Kindergarten



Source: Parent Information Form (2009).

Note: Percentages are based on the following sample sizes (from top to bottom): 474, 467, 473, 474. Percentages less than 5% are not labeled.

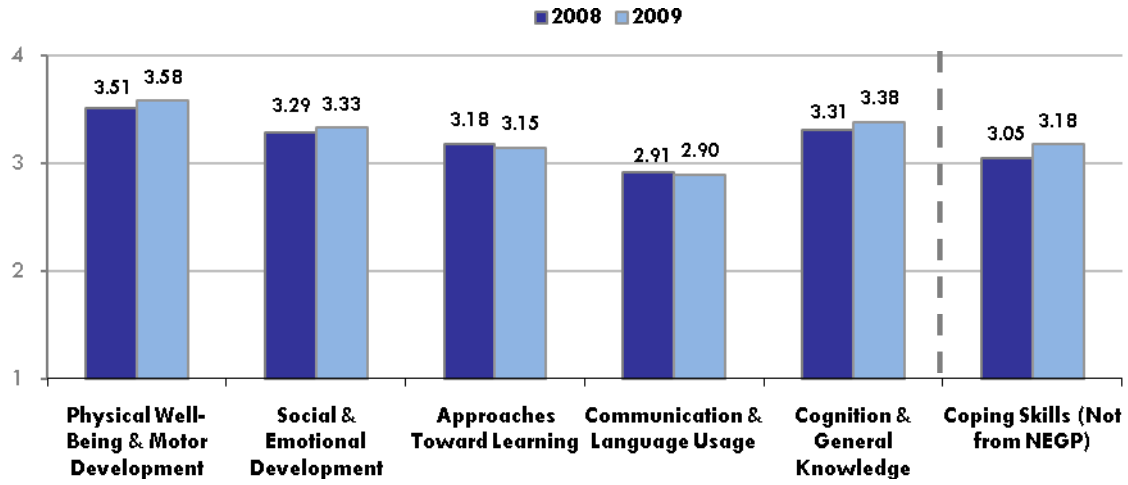
How Did the 2008 and 2009 Samples Compare?

Comparisons of how ready children in the 2008 sample were, as compared to children in the 2009 sample, must take into account that the samples in each year included a different mix of students from the participating county regions and districts. Perhaps because of this, the students in the 2009 study were different from the previous year's sample on a number of child and family background characteristics.

Based on findings from previous readiness studies, several of the shifts in child and family factors from 2008 to 2009 – such as fewer girls in the sample, more students from Low API schools (i.e., those with statewide API ranks of 1, 2, or 3), more students from low-income families – would be expected to be associated with lower levels of student readiness in the 2009 sample, as compared with 2008.

However, comparisons with 2008 data show that students in the 2009 sample had incrementally higher readiness levels across the readiness skills, with the biggest differences in *Physical Well-Being & Motor Development* and *Cognition & General Knowledge* (using the NEGP categories), and *Self-Care & Motor Skills* and *Kindergarten Academics* (using the *Basic Building Blocks* categories). Students in the 2008 sample had average readiness scores of 3.19 out of four; students in the 2009 sample had average readiness scores of 3.24. (See Figures 66 and 67 that follow).

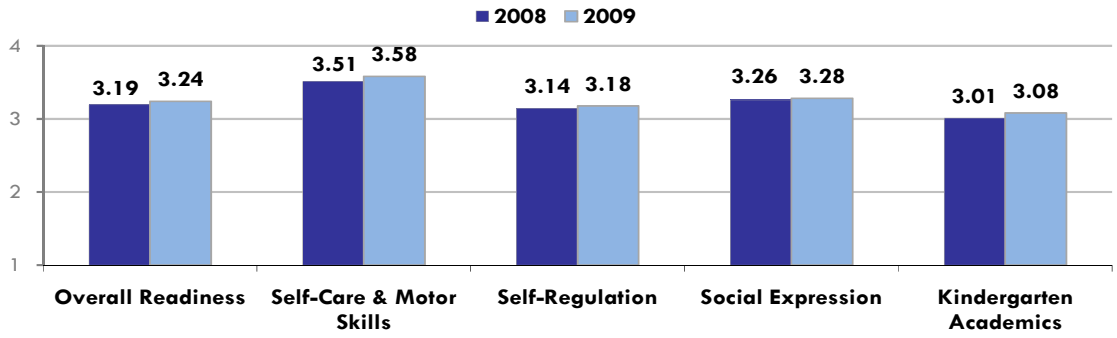
Figure 66. Comparing 2008 and 2009 Samples on NEGP Readiness Dimensions



Source: Kindergarten Observation Form I (2008, 2009).

Note: 2008 scores are based on 524-540 students. 2009 scores are based on 364-521 students. Means can range from 1 to 4. Scale points are as follows: 1=not yet, 2=just beginning, 3=in progress, 4=proficient.

Figure 67. Comparing 2008 and 2009 Samples on *Basic Building Blocks* of Readiness



Source: Kindergarten Observation Form I (2008, 2009).

Note: 2008 scores are based on 537-540 students. 2009 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.

Section Summary

Children's overall readiness in 2009 was well above the "In progress" level; their average readiness score was 3.24 on a one to four scale where four was "Proficient." Children were most ready in the NEGP skill dimension of *Physical Well-Being & Motor Skills* (*Self-Care & Motor Skills*

in the *Basic Building Blocks* framework). They were least ready in the NEGP area of *Communication & Language Usage*; according to the *Basic Building Blocks* groupings of skills, children were least ready in their *Kindergarten Academics* skills.

A comparison of students' proficiency levels in relation to their teachers' expectations revealed that students were generally on track with what their teachers expected, but they were entering school somewhat less prepared in *Self-Regulation and Social Expression* skills than their teachers would like, and 29 percent of students entered kindergarten significantly below their teacher's desired levels of overall skill proficiency. Using the "longitudinal study standard," which uses as a loose benchmark the average readiness scores of students who later achieved "Proficient" or "Advanced" status on their third grade STAR tests, about 37 percent of students are on track for success at third grade. (However, this standard should be used with caution, as it was not developed using Alameda County students.)

As with previous assessments, children's patterns of readiness sorted into four profiles, including *All Stars* who were ready for school across the board, *Focused on the Facts* students who were ready in *Kindergarten Academics* but had needs in social-emotional domains of readiness, *Social Stars* who were socially and emotionally ready but did not have strong academics skills, and *Needs Prep* students who were struggling across the spectrum of readiness skills.

Examinations of the association between children's age and their skill proficiency revealed that the ages of children who were scored as "proficient" on the individual skills ranged from five years and four months to five and one half years old. (For comparison, the average age of this sample of children was five years and four months.) Children who turned 5 before Sept 2 (a common kindergarten cutoff date for many other states besides California) generally had significantly higher readiness levels than children who turned five on or after September 2.

Identifying Portraits of School Readiness

Section Overview

The overall readiness data presented in the previous section give a very broad picture of children's strengths and challenges as they enter kindergarten, including children's general levels of proficiency as well as their skills within more specific readiness domains. But as any kindergarten teacher well knows, the mix of children's skills and abilities are very diverse at this age – each child may be strong in some areas, and in need of greater development in others. In an effort to better identify and describe the diversity of children entering school, ASR used a technique called cluster analysis to identify different groupings of children based on their patterns of readiness across the *Basic Building Blocks*. This section describes these patterns of readiness and takes a closer look at the characteristics of children who come to school with the different readiness patterns.

Background

In 2004, ASR first introduced four *Readiness Portraits* that provided a richer understanding of readiness patterns. Since 2004, ASR has validated the four distinct readiness profiles in 2005, 2006, and 2008 in Santa Clara County (ASR, 2005; ASR, 2006, ASR, 2007; ASR, 2009). The same *Readiness Portraits* have also been found across four years of assessment in San Mateo County and in ASR's assessment with San Francisco Unified School District students in 2007 (ASR, 2007), and in the pilot assessment conducted in Alameda County in Fall 2008 (ASR, 2009).

In analyzing student data from the Alameda County pilot assessment (conducted in Fall 2008), ASR started "from scratch," exploring whether a cluster analysis of Alameda County students' readiness data would yield the same four patterns of student readiness as had been observed in other regions. These analyses confirmed the same four *Readiness Portraits* as those that emerged in other counties. For the 2009 assessment, ASR applied the algorithm derived from the 2008 data to once again sort students into four readiness portraits, including:

- *All Stars*;
- *Needs Prep* students;
- *Social Stars*; and
- *Focused-on-the-Facts* students.

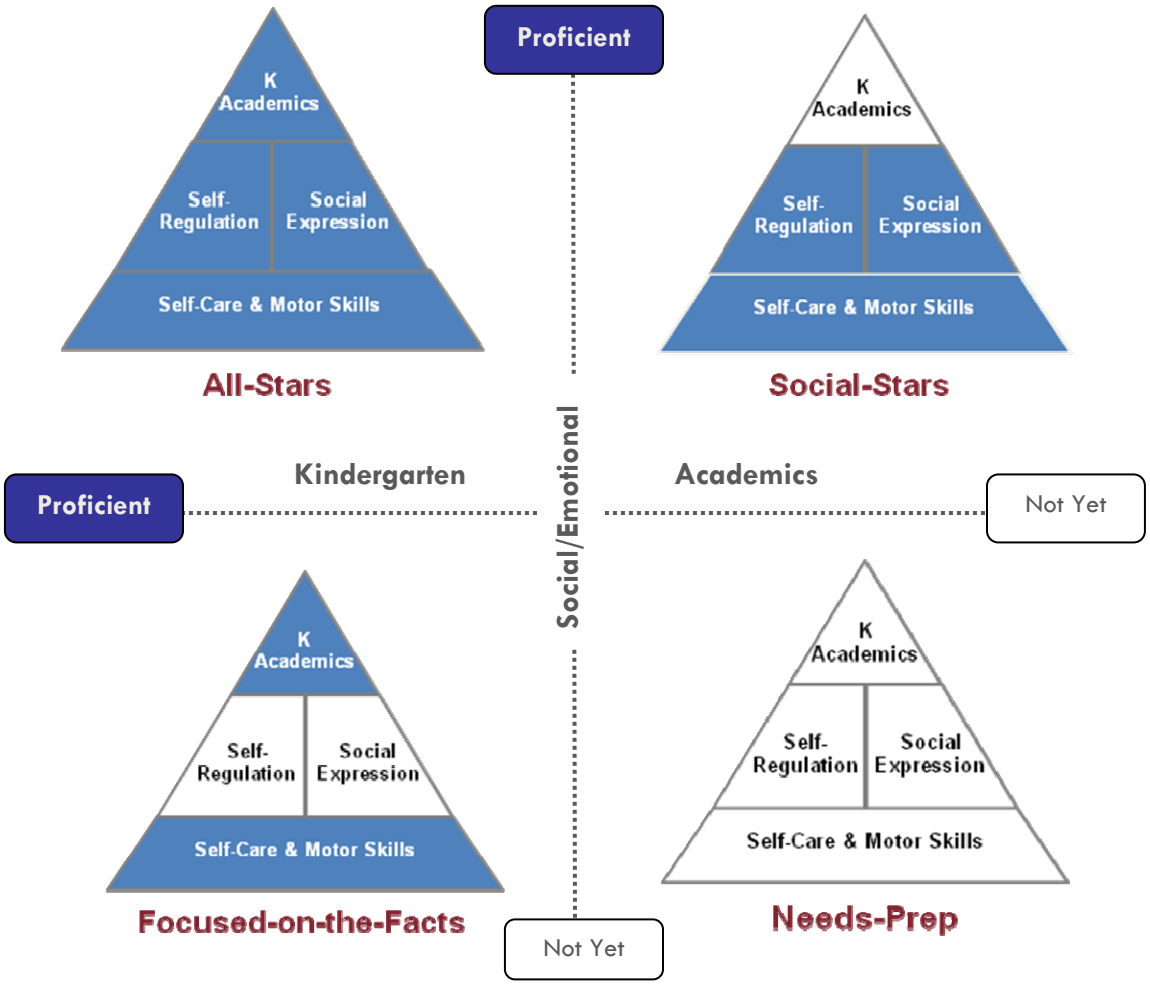
Each portrait reflects a different pattern of developmental strengths and challenges, basic student and family characteristics, and prevalence rates.[7] A complete discussion of the attributes of each portrait follows.

[7] The cluster names are used as a convenience for discussion of readiness patterns at the group level only. They are not ever intended for or to be used as labels for individual children.

Proficiency Patterns

The dark shading in Figure 68 shows where children in each portrait are near-proficient on the associated skills. *All Stars* are ready for kindergarten across all dimensions, whereas *Needs Prep* children need to catch up across all dimensions. The *Social Stars* and *Focused-on-the-Facts* profiles are proficient in some *Basic Building Blocks* but not others. *Social Stars* are skilled when it comes to the foundational *Self-Care & Motor Skills* and critical social-emotional skills, whereas *Focused-on-the-Facts* children are skilled at the nuts and bolts of learning – the *Kindergarten Academics* (as well as *Self-Care & Motor Skills*) – but have more challenges in the social-emotional arenas.

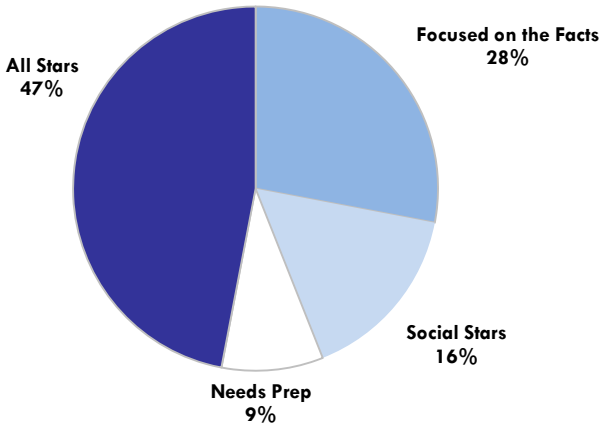
Figure 68. Four Readiness Portraits



Prevalence of the *Readiness Portraits* in Alameda County

In Alameda County in 2009, just under half of the sampled children (47%) fell into the *All Star* profile, entering kindergarten well-rounded across the four dimensions of readiness. Twenty-eight percent of new kindergarten students were *Focused-on-the-Facts* students who were solid on their *Kindergarten Academics* skills, but who needed to make some progress on their social-emotional skills. About 16 percent of new kindergarten students showed the opposite pattern of readiness; these *Social Stars* were strong on *Self-Regulation* and *Social Expression*, but had some needs in the area of *Kindergarten Academics* skills. And finally, about 9 percent of children sorted into the *Needs Prep* profile; these children have readiness needs across all *Basic Building Blocks.* (See Figure 69.)

Figure 69. Prevalence of Four Portraits of Students' Readiness



Source: Kindergarten Observation Form I (2009).

Note: This chart is based on 484 students.

Readiness Scores Across the Portraits

Figure 70 shows the *Basic Building Blocks* scores across the *Readiness Portraits*.[8] For each *Basic Building Block*, *All Stars* received the highest scores. They possess the skills needed to focus and manage their behavior in the classroom, their expressive skills are on track, and they are familiar with the basics of kindergarten content. In contrast, *Needs Prep* students may struggle as they enter school. They are just beginning to build skills in all important areas. *Social Stars* and *Focused-on-the-Facts* children score in the middle, with *Social Stars* exhibiting social-emotional strengths and *Focused-on-the-Facts* exhibiting strengths in *Kindergarten Academics*, although they are not as strong in these skills as the *All Stars*.

[8] NEGP scores by *Readiness Portrait* are available in Appendix 7.

Figure 70. Basic Building Blocks Scores, by Readiness Portrait

***Basic Building Blocks* Scores**	Overall	All Stars	Focused-on-the-Facts	Social Stars	Needs Prep
Sample sizes	*521*	*226*	*137*	*77*	*44*
Self-Care & Motor Skills	3.58	3.87	3.41	3.49	2.61
Self-Regulation Skills	3.18	3.72	2.75	3.06	1.84
Social Expression	3.28	3.80	2.91	3.13	2.02
Kindergarten Academics	3.08	3.61	3.14	2.14	1.79

Source: Kindergarten Observation Form I (2009).

Note: On all four *Basic Building Blocks*, means for each readiness portrait significantly differed from all other portraits at $p < .001$, according to oneway analyses of variance and follow-up post hoc tests, with one exception: *Focused on the Facts* students and *Social Stars* had similar levels of *Self-Care & Motor Skills.*

Bay Area Region Readiness Portraits

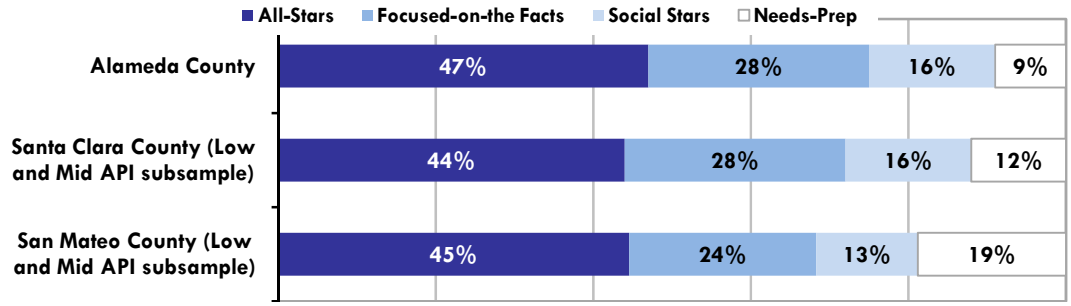
How does this data compare to other counties? As noted previously, the four *Readiness Portraits* have been observed and summarized in several county-wide readiness assessments in the Bay Area region. However, the other county-level *Readiness Portrait* data are of limited comparability to the students in the Alameda County sample because county-wide efforts include students in high-performing districts too – whereas the Alameda County sample specifically targeted districts that had a high number of low-performing schools.

To more effectively examine how the 2009 sample of Alameda County students compared with similar peers in other Bay Area regions, we selected out students from the Fall 2008 readiness assessments in San Mateo and Santa Clara counties who were from Low and Middle API schools (i.e., schools with statewide ranks from 1 to 3 and 4 to 7, respectively).

This resulted in a comparison sample in San Mateo County and Santa Clara County that was more similar to Alameda County's sample – although even with the more narrow comparison group, the Alameda County sample contained significantly more students from Low API schools than did the Santa Clara and San Mateo County samples (57% of sampled Alameda County students attended Low API schools, versus only 31% and 28% of the subset of Santa Clara and San Mateo County students, respectively).

The figure that follows shows how Low and Middle API Alameda County students compare with students from Low and Middle API schools in Santa Clara and San Mateo counties. The biggest difference among the three groups can be seen in the *Needs Prep* portrait. Even with a much greater proportion of Low API students, students in Alameda County were <u>less likely</u> to be in the *Needs Prep* group than were students in the Low and Middle API subsamples from the other two counties (particularly San Mateo County, where students were more than twice as likely to be *Needs Prep* students as in Alameda County). There were also slightly more *All Stars* in Alameda County than in the other two regions' subsamples. In short, comparisons with peers in other counties who come from similarly-performing schools suggest that Alameda County students are entering kindergarten as ready as – and in some cases much more ready than – their peers in other regions.

Figure 71. A Snapshot of Readiness Portraits across Different Assessment Samples



Source: Kindergarten Observation Form I (2008, 2009).

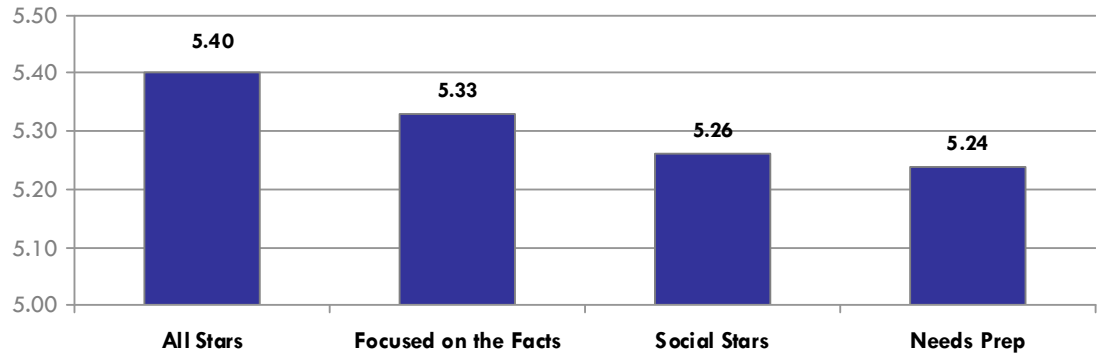
Note: This chart is based on 484 Alameda County students, 396 Santa Clara County students, and 363 San Mateo County students.

Who Are the Children in Each *Readiness Portrait*?

How do children with a profile of high readiness across all the skills (*All Stars*) differ from children who had readiness decrements across the readiness spectrum (*Needs Prep* students)? This section explores the ways that children from each of the Readiness Portraits differed from each other.

As the following figure shows, *All Star* students were somewhat older than children in the other three readiness portraits. Although this difference was statistically significant, it translates into an age difference of less than one month between *All Stars* and *Focused on the Facts* students, and less than two months between *All Stars* and *Needs Prep* students.

Figure 72. Average Age of Children in Each *Readiness Portrait*



Source: Kindergarten Observation Form I (2009).

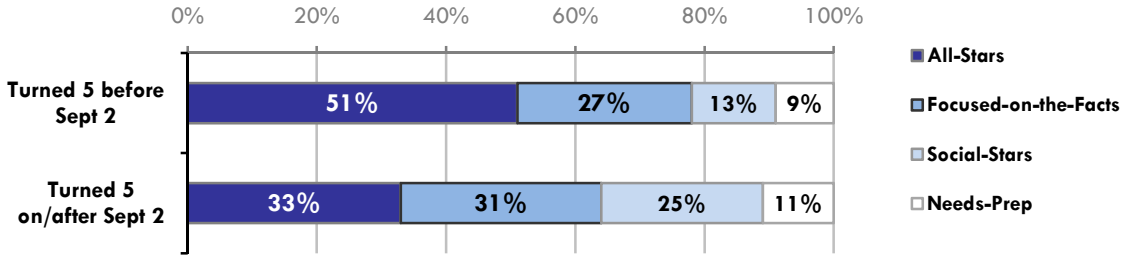
Note: Means are based on 226 All Stars, 136 Focused on the Facts, 77 Social Stars and 44 Needs Prep students. A oneway analysis of variance indicated that the portraits differed significantly overall. Post hoc tests revealed the following pattern of group differences: All Stars > (Focused on the Facts = Social Stars = Needs Prep).

Recall that in the in previous report section, an analysis was conducted looking at the readiness levels of students born before and after September 2 – the cut-off date used most commonly in other states to determine whether a child is old enough to enroll in kindergarten. Those

analyses showed that across almost all skill dimensions, children born on or after September 2 had significantly lower readiness levels.

How does this translate into children's readiness patterns according the four portraits? The figure below reveals an interesting trend: children who turn five on or after September 2 are not any more likely to be in the *Needs Prep* portrait; rather, they are almost twice as likely as older students to be *Social Stars* than their older peers. This suggests that these youngest students may not yet have the capacity to develop the *Kindergarten Academics* skills that would have otherwise enabled them to be *All Stars* at kindergarten entry.

Figure 73. Readiness Portraits as a Function of Children's Age

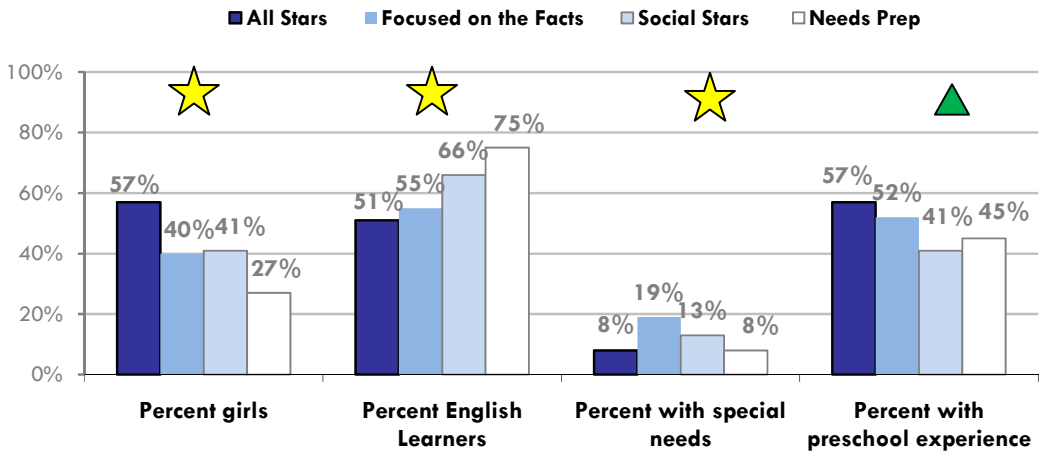


Source: Kindergarten Observation Form I (2009).

Note: This chart is based on 364 student turning 5 before Sept 2 and 119 students turning 5 on/after Sept 2. Portrait membership for the two groups differed significantly according to chi-square tests, $p < .001$.

The four *Readiness Portraits* also included different percentages of girls, English Learners, children with special needs, and children with experience in a licensed preschool or childcare center. The ethnic make-up of students in each portrait differed as well. Figure 74 and 75 that follow displays the differences in these variables across the four *Readiness Portraits*.

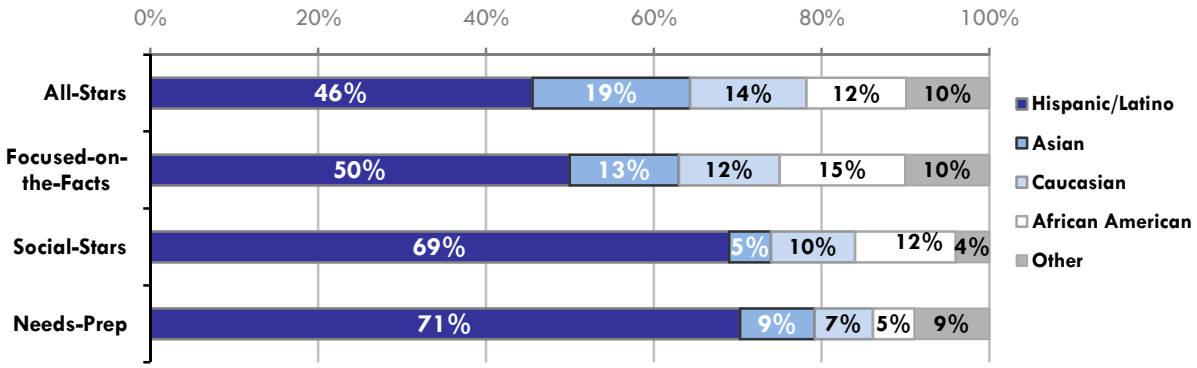
Figure 74. Student Gender, EL status, Special Needs Status, and Preschool Experience by *Readiness Portrait*



Source: Kindergarten Observation Form I (2009).

Note: Percentages are based on 213-226 All Stars, 132-137 Focused on the Facts, 74-77 Social Stars and 39-44 Needs Prep students. Yellow stars indicate significant group differences overall, according to chi-square tests ($p < .05$). The green triangle indicates a marginally significant group difference overall, according to chi-square tests ($p < .10$).

Figure 75. Student Race/Ethnicity, by *Readiness Portrait*

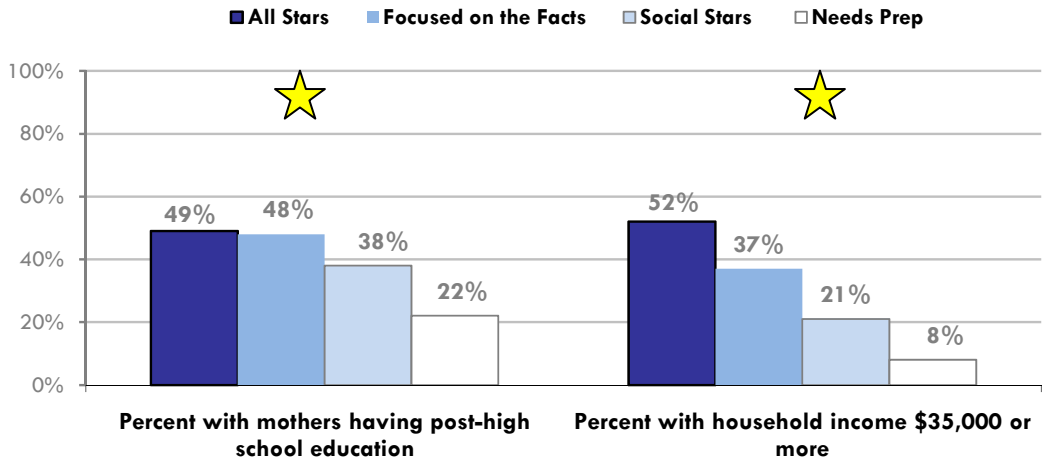


Source: Kindergarten Observation Form I (2009).

Note: Percentages are based on 226 All Stars, 137 Focused on the Facts, 77 Social Stars and 44 Needs Prep students. Race/ethnicity was significantly different across the groups overall, according to chi-square tests ($p < .01$).

Almost half of *All Stars* (49%) and *Focused-on-the-Facts* students (48%) had a mother who was educated beyond high school; however, less than one fourth of mothers of *Needs Prep* students (22%) had any education beyond high school. Just over half of *All Stars* (52%) had a household income of $35,000 or more. Income levels in the other groups were much lower; for example, only eight percent of households of *Needs Prep* students earned $35,000 or more per year.

Figure 76. Maternal Education Level and Income, by *Readiness Portrait*



Source: Kindergarten Observation Form I (2009).

Note: Percentages are based on 154-202 All Stars, 92-120 Focused on the Facts, 56-69 Social Stars and 26-36 Needs Prep students. Yellow stars indicate significant group differences overall, according to chi-square tests ($p < .05$).

The family environments of children in the four *Readiness Portraits* were not strikingly different, but some variations did emerge. *All Stars* were marginally more likely than *Social Stars* to have been read to an average of once a day or more, and *All Stars* reported marginally more weekly family activities than did *Needs Prep* students. However, on measures such as kindergarten transition activities, receipt of parent programs, services, or supports, and parent levels of social support and coping, families in all four *Readiness Portraits* looked similar.

Figure 77. Other Family Environment Characteristics, by *Readiness Portrait*

Characteristics	All Stars	Focused-on-the-Facts	Social Stars	Needs Prep
	A	B	C	D
Percent who are read to daily+	16% c	13%	6% a	7%
Average number of weekly family activities+	32.81 d	30.63	30.47	27.67 a
Number of K transition activities	4.19	3.96	3.78	3.73
Parent programs, services, supports received	2.44	2.33	1.98	2.38
Parent social support and coping	3.60	3.48	3.56	3.60

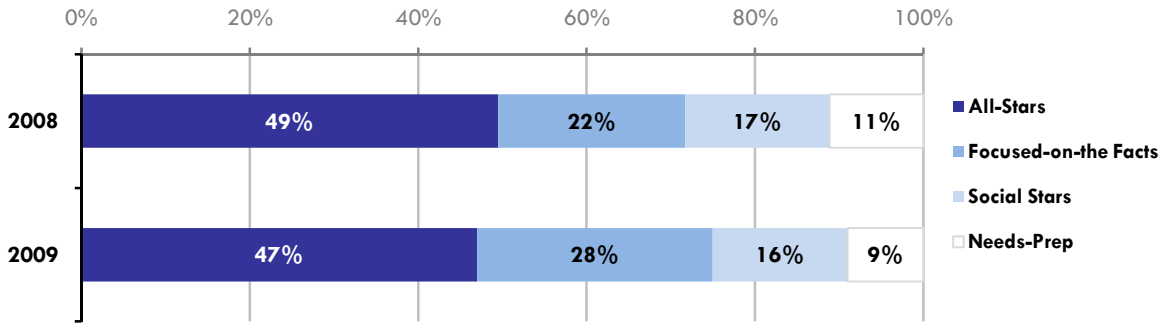
Source: Kindergarten Observation Form I and Parent Information Form (2009).

Note: Percentages are based on 190-205 All Stars, 122-126 Focused on the Facts, 66-69 Social Stars and 37-42 Needs Prep students. Significant differences according to appropriate statistical tests (chi-square tests or oneway ANOVAs) are indicated as follows: + $p < .10$. Lower-case letters below the mean scores and percentages signify which means are marginally different from one another according to post hoc tests. For example, the "c" beneath the *All Star* percentage for "Percent who are read to daily" (16%) means that this percentage differs marginally ($p < .10$) from the percentage among *Social Stars* (6%; column C).

How Did the 2008 and 2009 Samples Compare?

Comparisons of the patterns of children's readiness across the two samples reveal more 2009 students in the *Focused-on-the-Facts* group than had been in the 2008 sample, with each of the remaining portraits being somewhat less representative of 2009 students' readiness profiles than had been the case in 2008.

Figure 78. Prevalence of Four Portraits of Students' Readiness



Source: Kindergarten Observation Form I (2008, 2009).

Note: 2008 scores are based on 540 students. 2009 scores are based on 484 students.

Section Summary

Data revealed that about half of students (47%) were *All Stars*, whereas about one in ten (9%) were *Needs Prep* students. Twenty-eight percent of students were ready on their *Kindergarten Academics* but were lacking some socio-emotional skills, whereas the reverse was true for the remaining 16 percent of students who were *Social Stars*.

Being an *All Star* was associated with being older, being a girl, and coming from a family with higher levels of income and education. English Learners and children with special needs tended to be less often found in the *All Star* group than they were in the other *Readiness Portraits*.

Student and Family Factors Associated with School Readiness

Section Overview

The analyses reported to this point primarily serve a descriptive function. They provide an understanding of just how ready children are to enter kindergarten, and who tends to be more or less ready for school. For example, when we examine the characteristics of *All Star* students versus *Needs Prep* students, we focus on student or family characteristics one by one, without taking into account other (perhaps) related variables. Whereas this univariate approach -- looking at one variable at a time -- is critical to understanding who is "how ready" for school; univariate analyses cannot inform us about how the multitude of variables interact together to influence readiness scores. The underlying reasons children are more or less prepared for school need to be examined using a **multivariate approach.**

In this report section we take a multivariate approach — simultaneously taking into account all important measured variables — in order to better understand how variables interact to influence children's readiness for kindergarten. We often isolate the same variables described earlier (e.g., preschool experience), but in the analyses that follow we examine the differences of children with and without preschool experience, for example, **after ironing out children's differences on a wide range of other family, student, and school-level factors.**

One important thing to note with these multivariate analyses is that they cannot tell us why children vary; these analyses are correlational and cannot be used to infer that these variables cause greater school readiness. The only way to truly determine what causes increased readiness is by conducting a well-controlled experiment. It is also important to note that there are likely many other variables that could affect readiness that are beyond the scope of this assessment. Variables like temperament, parenting practices, sheer intelligence, and style of attachment to parents / guardians, for example, are not measured in this study.

Factors Associated with Overall Readiness

The readiness predictors for Alameda County students that were included in the multivariate analyses were as follows:

- Child variables: Child's age at enrollment, gender, special needs status, and English Learner status
- Family background variables: Income and maternal education level
- Child health variables: A three-item index of child well-being (child is well-fed, well-rested, generally healthy), low birth weight and having a regular medical provider
- Family stressors and support/coping resources: Index of family risk (including being a teen mother, being a single parent, having lost a job in the last year, having moved

frequently since the child was born, and having few parent supports); number of local family resources used; parental social support and coping, and an index of life concerns

- Direct school readiness-related variables: Preschool attendance, attendance at F5AC's Summer Pre-K, frequency of reading in the home, and number of kindergarten preparation activities in which parents had engaged

In addition, a few variables were added into the regression equation to control for any additional influence they might have on readiness scores. These included the number of days between school start date and observation date, whether children were in a full or half day kindergarten classroom, teachers' experience level, teachers' expectations about the readiness levels children need to be successful, and school API level.

Figure 79 shows the results of this regression analysis; depicted are those factors that are significantly related to overall kindergarten school readiness after taking into account all of the other variables. Before discussing the specific results, however, it may be helpful to provide background information regarding regression analysis. Regression analysis results in a set of what are called "beta coefficients." Each bar in Figure 79 represents the size of a beta coefficient.

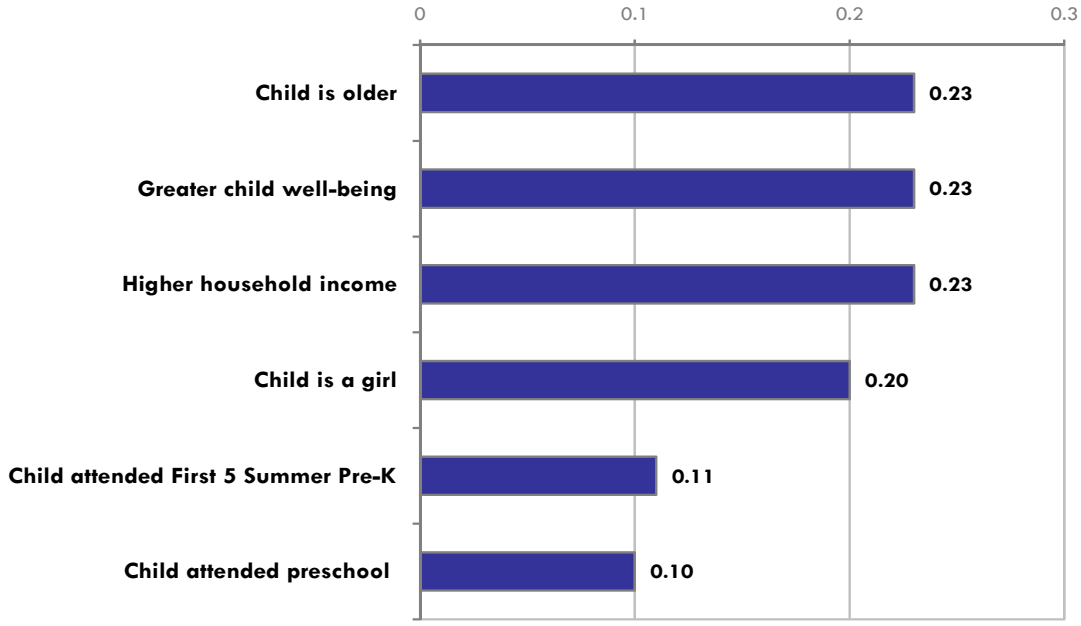
- Beta coefficients are a measure of the strength of association between each factor and overall readiness, over and above all of the other variables in the model. For example, this analysis shows the pure and independent relation between preschool experience and school readiness, taking out any association that preschool attendance might share with other variables like income (i.e., those who went to preschool tend to come from families with larger incomes).

- The magnitude of each beta coefficient signals whether the factor in question is strongly or weakly associated with school readiness. All of the factors depicted in Figure 79 are statistically significant and, therefore, associations with readiness are statistically strong.

- All coefficients can be compared to one another to determine their relative strengths. A coefficient of .20, for example, is twice as strong as is a coefficient of .10.

Regression results indicated that six factors explained 28 percent of children's readiness scores. Three variables emerged as being equally strong predictors of readiness. They included being older, scoring highly on an index of basic well-being (teacher reports of being well-fed, well-rested, and generally healthy), and having higher household income. Girls were more ready than boys, and having attended a licensed preschool or childcare center (including Head Start, State Preschool or private program) or First 5-sponsored Summer Pre-K was also associated with greater school readiness.

Figure 79. 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. $R^2 = .28$).

Factors Associated with Each *Basic Building Blocks* Dimension of Readiness

The previous figure shows the factors that were associated with overall readiness scores. To see how each individual *Basic Building Block* readiness dimension was related to the different factors, ASR performed a regression on each skill dimension, using the same set variables described previously. Figure 80 shows which factors emerged as significant or marginally significant predictors of each *Basic Building Block*. The figure also displays how much of the readiness dimensions were explained by the predictors (as indicated by the R^2 and adjusted R^2 statistics at the bottom of the table). It is particularly noteworthy that the predictors did a better job of explaining *Kindergarten Academics* (*Adj* R^2= .25) than they did *Self-Regulation* skills (*Adj* R^2 = .18).

Figure 80. Beta Weights of Factors Significantly Associated with the *Basic Building Blocks* of School Readiness

Predictors	Overall Readiness	Self-Care & Motor Skills	Self Regulation	Social Expression	Kindergarten Academics
Is older	.23	.14	.17	.20	.26
Greater child well-being	.23	.27	.18	.16	.20
Higher household income	.23	.11	.21	.14	.19
Is a girl	.20	.11	.21	.19	.15
F5AC Summer Pre-K experience	.11			.12	.12
Preschool experience	.10			.12	.11
Higher maternal education level		.10		.13	.12
Has special needs			.10		
Low birth weight				.09	
Child has a regular pediatric provider			.10		
Overall R^2/Adjusted R^2	.33/.28	.25/.20	.24/.18	.28/.23	.30/.25

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

Note: Factors with a beta weight listed were significant or marginally significant predictors of readiness when all other variables were simultaneously entered into the model. The regression models for all the *Basic Building Blocks* and overall readiness were statistically significant.

The figure also shows that several factors – child well-being, age, income, and sex – were related to all dimensions of readiness. Interestingly, F5AC Summer Pre-K and preschool showed very similar patterns of association with readiness skills – both were related to *Social Expression* and *Kindergarten Academics*, and their degree of association with these *Basic Building Blocks* was similarly strong.

How Did the 2008 and 2009 Samples Compare?

Regression findings were similar in the 2008 and 2009 samples, with a few notable exceptions

- The emergence of income as a significant predictor of readiness in 2009
- The receding influence of special needs status in the prediction of readiness
- The slight decrease in the predictive power of the 2009 regression models, relative to 2008

For the most part, however, regression results across the two assessment samples – as well as across other regions where readiness has been measured -- are consistent in their messages: certain characteristics of children (age, gender, well-being) are generally predictive of enhanced readiness, with preschool or F5AC Summer Pre-K contributing to readiness boosts among those who have been exposed to such programs.

Section Summary

Six factors explained 28 percent of children's readiness scores in Alameda County. The strongest predictors of readiness were being older, scoring highly on an index of well-being, and being from a household with a higher income. In addition, girls and children with preschool or F5AC Summer Pre-K experience were also more ready for school.

Children's age, well-being, income, and gender were important in explaining each of the *Basic Building Blocks* as well. Preschool and F5 Summer Pre-K experience were strongly related to *Social Expression* skills and *Kindergarten Academics*.

Special Section: A Closer Look at Participation in F5AC Programs and School Readiness

Section Overview

A key research question examined in this pilot assessment was the following: To what extent is exposure to F5AC programs and services associated with enhanced school readiness? The previous section's regression results revealed a significant relationship between participation in F5AC's Summer Pre-K and enhanced skills in some domains of readiness. This section delves further into this question, examining who received F5AC services and providing a more comprehensive analysis of the readiness levels of F5AC program recipients, specifically F5AC Summer Pre-K.

Background

F5AC Programs Examined

F5AC database records were merged with the assessment data to: (1) identify those children who had received F5AC intervention(s); and (2) compare their readiness levels to those of their peers who had not received F5AC services. For purposes of this research effort, F5AC provided participation data on five core programs. The "Methodology" section of this report describes that matching process in greater detail; in sum, that effort led to 138 matches to the F5AC database. In other words, 26 percent of the consenting families who participated in the assessment had been touched by one or more of the F5AC programs targeted for examination in this study.

The five F5AC programs to which students in the assessment sample were able to be matched included the following (the number of children in the assessment matched to the program is listed in parentheses):

- **Summer Pre-K:** This program is a five-to-six week Summer Pre-K program for children with no prior preschool or licensed childcare experience. The program is designed to provide children with an opportunity to learn in a developmentally appropriate classroom environment and expose them to social experiences and develop various skills necessary for success in kindergarten. Parents and children are introduced to the school setting, easing the transition to kindergarten (77 matches).

- **Post-partum home visits:** This program includes up to three home postpartum visits for medical/ weight checks, basic anticipatory guidance for parents, and resource referral (60 matches).

- **Pediatric Development Screening Support - Healthy Steps**: This program provides developmental screening of children referred for potential development concerns (8 matches)

- **Preschool with Mental Health Consultations:** Preschool teachers receive consultation from mental health specialists on classroom management and addressing challenging behaviors (6 matches).

- **Intensive Family Support Case Management:** The program involves up to three years of home-based case management. The program targets populations at very high social and/or medical risk (e.g., infants discharged from NICU, children of teen parents, families with calls to Child Protective Services). The case management focuses on caregiver-child relationships, maternal depression and developmental screenings and providing parents with support in navigating community resources (4 matches).

Figure 81. Summary of Matches between F5AC Programs and Students in Readiness Assessment

F5AC program	Number matched	Percent of sample
Summer Pre-K	77	15%
Post-partum visits	60	12%
Pediatric Development Screening Support	8	2%
Preschool with Mental Health Consultations	6	1%
Intensive Family Support Case Management	4	1%
Total (matched to one or more of above programs)	138	26%

Source: ECChange database, January, 2009.

Note: Sample size = 521.

Participants in F5AC Programs

Initial analyses divided the sample of children assessed into those who did versus did not receive one or more of these F5AC interventions. As Figure 82 reveals, the group of families receiving F5AC services was a high-need group. For example, as compared with those who did not receive F5AC services, those who did came from families with lower income and education levels, and they engaged in fewer family activities. The also tended to have been more likely to have lost a job in the past year, but this was a non-significant difference.

However, the two groups of families did appear to be similar in terms of their connections to their communities. They had used similar numbers of parenting services and supports, and they had engaged in similar amounts of kindergarten transition activities. Also noteworthy is the fact that the rate of special needs among the two groups of children was slightly higher for those receiving F5AC services than those who did not (16% versus 11% respectively, although this did not reach statistical significance); this is likely because children with special needs were a target of these services, but it also may indicate that children were being screened for these needs at higher rates and thus their special needs were more likely to have been detected.

Figure 82. How Do F5AC Program Recipients Differ from Non-Recipients?

Child and family characteristics	Non-recipients	Recipients
Teen mom	10%	9%
Single parent	24%	27%
Number of addresses since child's birth	2.05	2.08
Lost job last year	37%	44%
Mother has post-high-school education***	51%	26%
Household earns $35,000 or more/year**	43%	27%
Number of weekly family activities***	32.72	28.75
Number of K transition activities	4.01	4.07
Parent programs, services, supports received	2.29	2.23
Average parent coping and social support	3.56	3.48

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

Note: Sample sizes range from 259-349 for F5AC non-recipients and 90-125 for recipients. Significant differences according to chi-square tests or t-tests are indicated as follows: * p < .05; ** p < .01; *** p < .001.

Initial Exploration of Links between Readiness and Receipt of F5AC Services

Given that families receiving F5AC services were higher in need than families who did not receive F5AC services, any examinations of readiness must first attempt to "even out" the many differences between these two groups that could also have an impact on children being prepared to succeed in school. Thus, before comparisons of children's readiness levels were made, a 10-item "risk index" variable was computed and used to control for the considerable differences between those who did and did not receive F5AC services.

Initial analyses comparing children who did versus did not receive F5AC services revealed that children receiving F5AC interventions had marginally higher readiness levels on some dimensions (*Self-Care & Motor Skills* and *Self-Regulation*), but that the F5AC programs as a whole were not strongly related to improved readiness. This mirrors findings from last year's analyses as well, and it is not unexpected. Although in theory any of these programs could lead to enhanced readiness skills, for most of the programs examined in these analyses, the connection to readiness is somewhat indirect. For example, it is possible that receiving one to three postpartum visits after the birth of a child might lay the foundation for a family context that facilitates development of the child's school skills. But there are also many other intervening factors – as well as the passage of a great deal of time – that make this connection less strong than would be expected in a program like the F5AC Summer Pre-K, which directly addresses development of school readiness skills.

With this in mind, ASR followed up these general, exploratory analyses with a much more focused set of analyses. Specifically, the following set of questions was examined:

- How do the readiness levels of children who participated in F5AC's Summer Pre-K program compare to those of children who had not had any preschool experience?

- How do children who have participated in the F5AC Summer Pre-K compare to children who attended preschool?

Do Children Who Attend the Summer Pre-K Program Show Enhanced Readiness Skills?

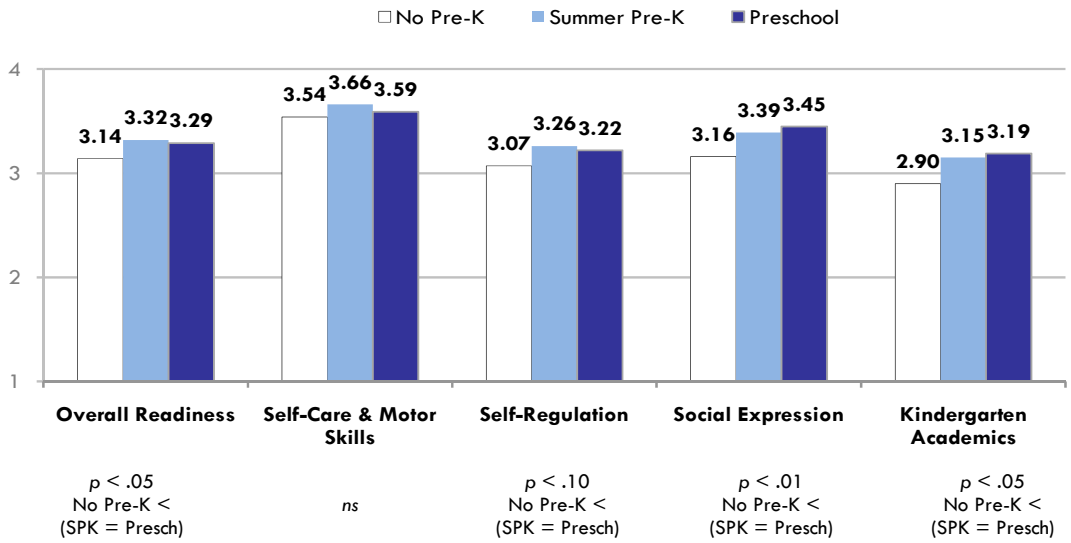
In conjunction with the regression analyses suggesting benefits to children who participated in F5AC's Summer Pre-K program, ASR used analysis of covariance techniques to examine average readiness levels of participants in F5AC's Summer Pre-K program. To conduct this analysis, children were divided into three groups: (1) those without preschool experience of any kind; (2) those who were verified through the F5AC database as having attended the Summer Pre-K program; and (3) those who had a longer-term preschool experience in a licensed preschool or childcare center, including Head Start, State Preschool or private programs. ASR compared the three groups on their overall readiness levels, as well as each of the individual *Basic Building Blocks*.

Significant readiness differences were found among the three groups, according to an analysis of covariance that controlled for initial differences in the groups' make-up – including a composite "family risk" measure as well as children's special needs status. The adjusted means for each of the three groups is displayed in Figure 83. In addition to confirming findings shown across all readiness assessments conducted to date that students with preschool experience outperform students who have had no preschool experience, there was also support for the benefits of shorter-term pre-K programs, as described further below.

Were Summer Pre-K students more ready for school than children with no preschool experience? Yes. Across the spectrum of school readiness skills, Summer Pre-K students had higher readiness scores than students with no pre-K experience. This difference was statistically significant (or marginally significant) overall and for all Basic Building Blocks except *Self-Care & Motor Skills*.

How do children who have participated in the F5AC Summer Pre-K compare to children who attended preschool? As the figure on the next page shows, students who attended Summer Pre-K made the most of their short time in the program. Across all the skill dimensions and overall, the readiness levels of Summer Pre-K students were statistically similar to those of their preschooled peers.

Figure 83. Students' Readiness as a Function of Pre-K Experience (Means Adjusted for Family Risk and Special Needs Status)



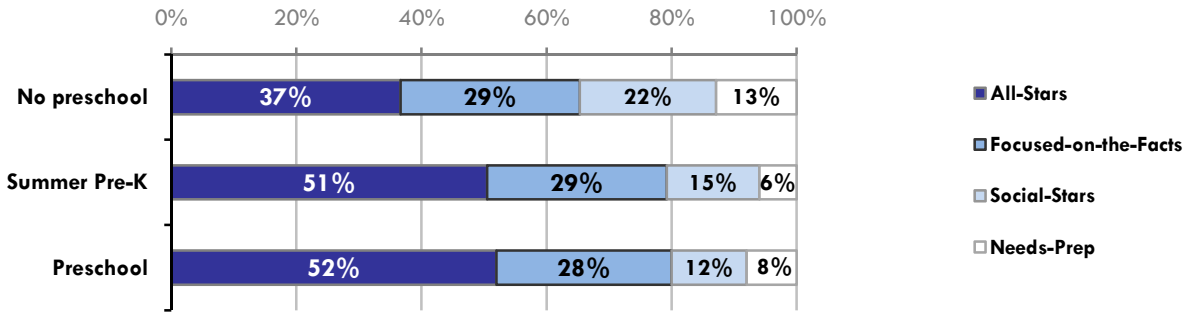
Source: Kindergarten Observation Form I (2009).

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.

ASR next examined how Summer Pre-K students looked in terms of their *Readiness Portraits*, investigating whether these students tended to come to school with a broad base of proficiency across all skills, or whether they tended to have gaps in any particular skill dimensions.

As the following figure shows, the *Readiness Portraits* of Summer Pre-K students looked very similar to those of students with full preschool experiences. In both of these groups, just over half of students were *All Stars*, whereas only 37 percent of students without preschool experience were *All Stars*.

Figure 84. Readiness Portraits as a Function of Pre-K and Preschool Experience



Source: Kindergarten Observation Form I (2009).

Note: This chart is based on 167 No Preschool students, 73 Summer Pre-K students, and 225 Preschool students.

How Did the 2008 and 2009 Samples Compare?

As noted in the previous section, some caution should be used in comparisons between 2008 and 2009 samples, as the children included in each assessment differed on several key dimensions. The data presented here do suggest that there may be strong benefits to participation in a high-quality, short-term Summer Pre-K program. And this year's data shows boosts in the Kindergarten Academics scores of these students –a finding which was not present last year. (One other difference to keep in mind is that students with a longer-term preschool experience did not have as high scores on K Ac as in the 2008 study.)

Section Summary

Comparisons of those who had and had not received F5AC services showed that F5AC recipients were a particularly high-need group. Compared to those who did not receive F5AC services, recipients were more likely to have been from families that were less-educated, had lower incomes and engaged in fewer family activities.

Focused examinations comparing three groups of students – those who had no preschool or pre-K experience, those who had F5AC Summer Pre-K experience, and those who had attended a licensed preschool or child care center (e.g., Head Start, State Preschool or private program) – revealed that Summer Pre-K students were more ready for school than children with no preschool experience. In fact, their readiness scores across all skill dimensions were not significantly different from those of students with a full preschool experience.

A Portrait of Teachers and Classrooms

Section Overview

The primary purpose of the *Teacher Survey on Importance of Readiness Skills* was to learn how teachers view students' readiness for school – including what proficiency levels they think are required for success in school, as well as the skills that they think are most important for school entry, the skills they believe are easiest to impact, and on which skills they spend the most time. However, this survey also included some basic information about the students' kindergarten classrooms and teachers.

Kindergarten Classroom and Teacher Characteristics

To gain a better understanding of the classrooms that new kindergarten students enter – as well as the teachers who are so integral to their successful transition into school – all kindergarten teachers participating in the assessment answered a series of questions about their kindergarten classroom and their own background on the teacher survey.

Most classrooms in the assessment were full or extended day kindergarten classrooms, but six teachers indicated that they taught in a half-day setting.

Figure 85. Type of Kindergarten Classrooms

Classroom type	Frequency	Percent
Full or extended day	23	79%
Half-day	6	21%

Source: Teacher Survey on Importance of Readiness Skills (2009).

Note: Sample size = 29.

Despite the high percentage of English Learners among their students, about two-thirds of the classrooms (66%) did not include any instruction in a language other than English. Four teachers (14%) indicated that up to twenty-five percent of their instruction was done in a language other than English, and in another four classrooms (those teaching with a bilingual program), more than 50 percent of instruction was conducted in a language other than English.

Figure 86. Use of Languages Other than English for Classroom Instruction

Instruction in other languages	Frequency	Percent
Percentage of instruction in language other than English		
0%	19	66%
1-25%	4	14%
26-50	2	7%
51-75	2	7%
More than 75%	2	7%
Percent teaching with a bilingual program	4	14%

Source: Teacher Survey on Importance of Readiness Skills (2009).

Note: Sample sizes are as follows: 29, 29. Percentages may not sum to 100 due to rounding.

Most of the teachers participating in the assessment were Caucasian (59%). The next most common racial/ethnic background was African American, with five teachers falling into this category.

Figure 87. Race/Ethnicity of Participating Kindergarten Teachers

Ethnicity	Frequency	Percent
Caucasian	17	59%
African American	5	17%
Hispanic/Latino	3	10%
Multi-ethnic	2	7%
Other	2	7%

Source: Teacher Survey on Importance of Readiness Skills (2009).

Note: Sample size = 29. Percentages may not sum to 100 due to rounding.

As Figures 88 and 89 show, over one third of the teachers in the assessment were bilingual – most of them spoke Spanish as their second language.

Figure 88. Bilingual Status of Participating Kindergarten Teachers

Language Status	Frequency	Percent
Bilingual	11	39%
Not bilingual	17	61%

Source: Teacher Survey on Importance of Readiness Skills (2009).

Note: Sample size = 28.

Figure 89. Languages Spoken by Bilingual Teachers

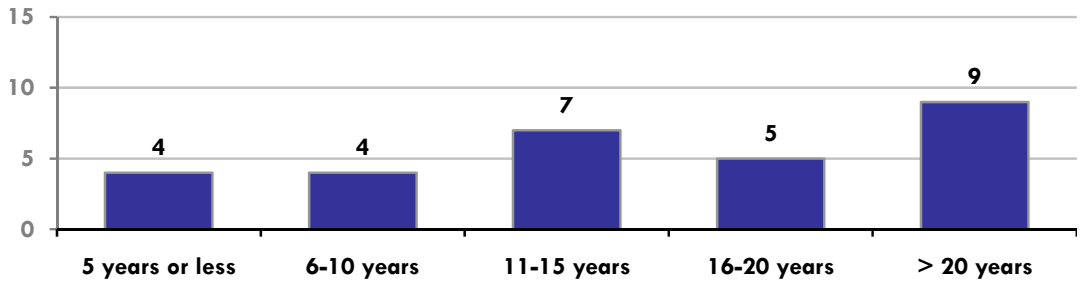
Language	Frequency	Percent
Spanish	8	73%
Filipino	1	9%
Farsi or Dari	1	9%
Other	4	36%

Source: Teacher Survey on Importance of Readiness Skills (2009).

Note: Sample size = 11 teachers who indicated they were bilingual and provided a response to the question. Total sums to more than 11 (more than 100%) because two teachers spoke more than one additional language.

Teachers had a wide range of experience teaching elementary school and kindergarten. Figure 90 shows the number of years teachers have taught elementary school (mean = 16.28 years), whereas Figure 91 shows the number of years teachers have taught kindergarten (mean = 8.97 years).

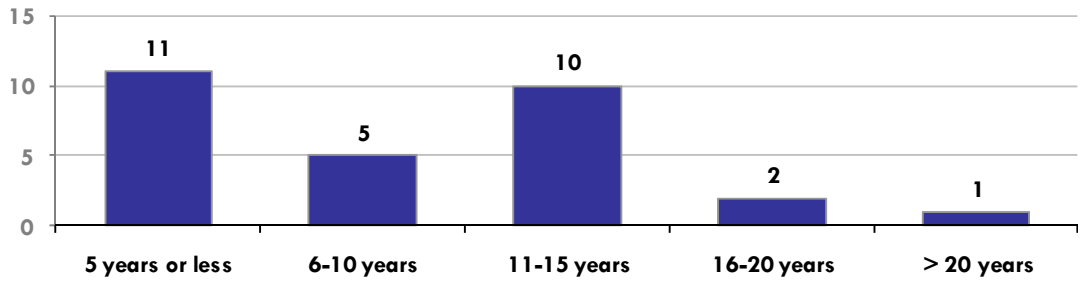
Figure 90. Number of Teachers with Different Levels of Experience Teaching Elementary School



Source: Teacher Survey on Importance of Readiness Skills (2009).

Note: Sample size = 29.

Figure 91. Number of Teachers with Different Levels of Experience Teaching Kindergarten



Source: Teacher Survey on Importance of Readiness Skills (2009).

Note: Sample size = 29.

Teachers indicated all levels of education they had completed. Twenty six teachers had at least completed a bachelor's degree, and eight teachers had gotten an advanced degree.

Figure 92. Teachers' Descriptions of Their Levels of Education Completed

Education Level	Frequency	Percent
Associates degree	9	31%
Bachelor's degree	26	90%
Advanced degree	8	28%
Other degree	3	10%

Source: Teacher Survey on Importance of Readiness Skills (2009).

Note: Sample size = 29. Total exceeds 100% because teachers were instructed to choose all that applied.

All teachers in the assessment had a full teaching credential; in addition, forty percent had taught early childhood education in addition to their elementary school experience.

Figure 93. Other Teacher Background and Training

Experience	Frequency	Percent
Teachers who have a full credential	29	100%
Teachers who have taught early childhood education	14	40%

Source: Teacher Survey on Importance of Readiness Skills (2009).

Note: Sample sizes are as follows: 29, 25.

Teacher Beliefs about School Readiness

Desired Levels of Proficiency for Incoming Kindergarten Students

As described previously, the bulk of the teacher survey focused on teachers' beliefs about readiness; in particular, once teachers had completed their measures of their students' readiness levels, they were asked to rate how proficient they thought children should be in order to have a successful transition to kindergarten. Those desired proficiency levels were bundled according to the *Basic Building Blocks* and presented alongside children's actual readiness levels in the section entitled "School Readiness in Alameda County – 2009."

Figure 94 provides a more detailed look at those desired proficiency levels – this time looking at teachers' average desired proficiency ratings for each individual readiness skill. As the figure shows, teachers expected children to be most proficient on skills relating to self-help and relating to adults, as well as staying focused, having impulse control/self-regulating, participating in circle time, and handling frustration well.

Teachers expect the least from their students mainly in *Kindergarten Academics*; two of the skills with the lowest expected proficiency levels come from that group of skills, including recognizing rhyming words and letters, and engaging with books. Teachers also felt that children did not need to have advanced skills in their expressive abilities before starting kindergarten.

Figure 94. Teachers' Desired Levels of Proficiency Across 24 Readiness Skills

School Readiness Skills	Overall Scores
Use of small manipulatives such as crayons, paintbrush, buttons, zippers, etc.	3.43
Has general coordination on playground (kicking balls, running, climbing)	3.27
Performs basic self-help/self-care tasks (toileting, eating, washing hands)	3.97
Relates appropriately to adults other than parent/primary caregiver (converses with, seeks help from)	3.57
Appropriately expresses needs and wants verbally in primary language	3.43
Works and plays cooperatively with peers (takes turns and shares, helps others)	3.33
Controls impulses and self-regulates (is not disruptive of others or class)	3.50
Expresses curiosity and eagerness for learning (tries new activities, asks questions)	3.40
Stays focused / pays attention during activities	3.53
Follows one- to two-step directions	3.43
Participates successfully in circle time (listens, focuses, sits still, engages)	3.50
Has expressive abilities (tells about a story or experience in response to a prompt)	2.97
Recognizes the letters of the alphabet (note: may be CAPs, lowercase or combination)	2.87
Writes own first name (spelling and writing all letters correctly)	3.30
Can recognize rhyming words ("Shoe rhymes with Glue. Does Blue rhyme with Glue? Does Dog?")	2.40
Engages with books (knows where a book starts, associates print with storyline, pretends to read)	3.03
Engages in symbolic / imaginative play with self or peers (plays house, fire station)	3.30
Can count 10 objects correctly ("Please give Maria 5 crayons" or "Please put 10 blocks in the basket")	3.17
Recognizes eight primary colors (Crayola basic 8: red, orange, yellow, green, blue, purple, brown, black)	3.40
Recognizes three primary shapes (circle, triangle square)	3.33
Comforts self with adult guidance (e.g., goes to quiet area when upset; identifies emotion s/he is feeling)	3.30
Negotiates with peers to resolve social conflicts with adult guidance (e.g., engages in problem-solving)	3.20
Expresses empathy or caring for others (e.g., consoles or comforts a friend who is crying)	3.23
Handles frustration well	3.50

Source: Teacher Survey on Importance of Readiness Skills (2009).

Note: Scores are based on 30 teachers.

An Overview of Teacher Priorities

In addition to teachers indicating the levels of proficiency they believed children should have in order to successfully transition to kindergarten, teachers also reported the following:

- Which five readiness skills they considered to be <u>most</u> important to ensure a smooth transition into kindergarten

- Which five readiness skills were easiest to impact during the course of the school year

- On which five skills they spent most of their time during the school year

A summary of teachers' priorities follows. This section first presents teacher beliefs about skill importance, ease-of-change, and time spent on the different *Basic Building Blocks* of readiness. This summary information is then followed by a more specific look at the individual skills that teachers prioritized.

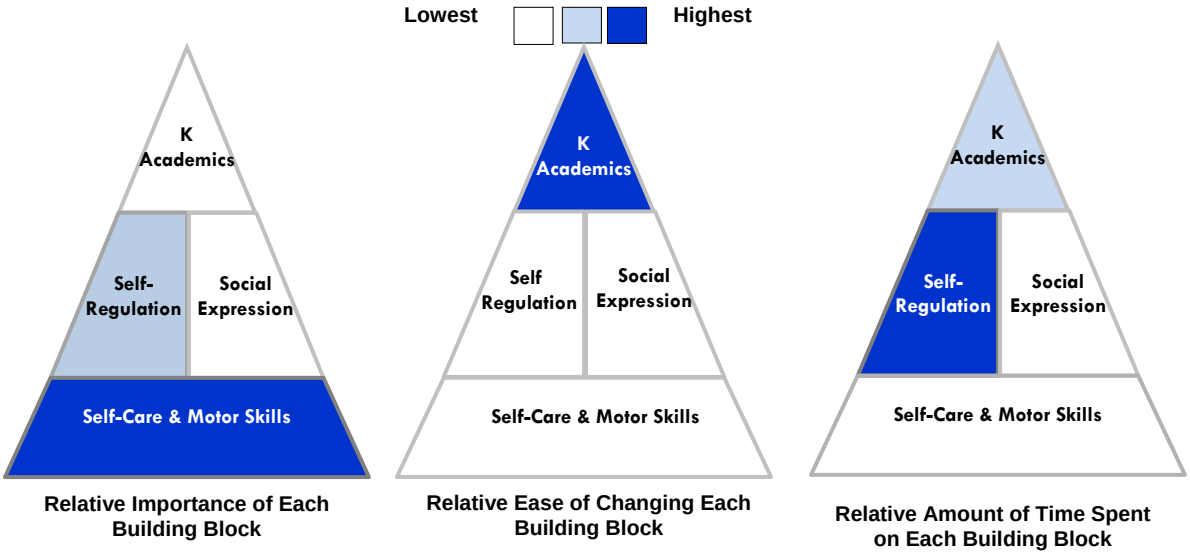
The *Basic Building Blocks* pyramids shown in Figure 95 are shaded to indicate teachers' differing priorities. Darker shading is used to highlight dimensions on which teachers placed a higher priority, whereas lighter shading is used to show dimensions on which teachers placed less of a priority. The story told by these pyramids is generally consistent with findings from previous regional assessments. Specifically:

- When thinking about which readiness skills are most important to kindergarten entry, teachers placed the highest importance on *Self-Care & Motor Skills*, followed closely by *Self-Regulation* skills. *Social Expression* and *Kindergarten Academics* are largely seen as less important skills to have mastered at kindergarten entry.

- Teachers felt it was easiest to impact *Kindergarten Academics* skills during the school year. They felt that it was less easy to impact students' *Self-Regulation, Social Expression*, and *Self-Care and Motor Skills* during the kindergarten year.

- Perhaps because so many children enter school below their teachers' desired levels of proficiency on *Self-Regulation* (see Figure 57 in the section "School Readiness in Alameda County – 2009"), teachers reported spending more classroom time on *Self-Regulation* than they did on other skills. *Kindergarten Academics* – the core components of kindergarten instruction – were perceived to take less of their classroom time than *Self-Regulation* skills. *Self-Care & Motor Skills and Social Expression* were the skills on which teachers spent the least amount of time.

Figure 95. Teacher Priorities for Skill Importance, Ease-of-Changing, and Amount of Time Spent



Source: Teacher Survey on Importance of Readiness Skills (2009).

Note: Ratings were based on 29, 27, and 29 teachers, respectively. Significant or marginal group differences, according to paired t-tests were as follows: Importance ratings: = Self-Care & Motor Skills > Self-Regulation > (Kindergarten Academics = Social Expression); Ease of Changing ratings: Kindergarten Academics > (Self-Regulation = Social Expression = Self-Care & Motor Skills); Amount of Time Spent ratings: Self-Regulation > Kindergarten Academics > (Social Expression=> Self-Care & Motor Skills).

A Closer Look at What Skills Are Most Important to Teachers

Teachers were asked to check five skills that they considered to be most critical for a smooth transition into kindergarten. The highest number of teachers prioritized the following skills: *Performs basic self-help/self-care tasks*, *Controls impulses and self-regulates,* and *Stays focused/pays attention during activities.* No teachers believed that rhyming skills, expressive abilities, or expressing empathy or caring for others were important skills that children needed upon kindergarten entry.

Figure 96. Skills Selected as a Top-Five Important Skill

School Readiness Skills	Number of teachers selecting
Performs basic self-help/self-care tasks (toileting, eating, washing hands)	23
Controls impulses and self-regulates (is not disruptive of others or class)	15
Stays focused / pays attention during activities	11
Use of small manipulatives such as crayons, paintbrush, buttons, zippers, etc.	9
Follows one- to two-step directions	9
Writes own first name (spelling and writing all letters correctly)	8
Relates appropriately to adults other than parent/primary caregiver (converses with, seeks help from)	8
Recognizes eight primary colors (Crayola basic 8: red, orange, yellow, green, blue, purple, brown, black)	8
Appropriately expresses needs and wants verbally in primary language	7
Participates successfully in circle time (listens, focuses, sits still, engages)	7
Works and plays cooperatively with peers (takes turns and shares, helps others)	6
Can count 10 objects correctly ("Please give Maria 5 crayons" or "Please put 10 blocks in the basket")	6
Handles frustration well	6
Recognizes the letters of the alphabet (note: may be CAPs, lowercase or combination)	5
Recognizes three primary shapes (circle, triangle square)	3
Comforts self, using adult guidance when appropriate (e.g., goes to quiet area when upset; identifies emotion s/he is feeling)	3
Negotiates with peers to resolve social conflicts, using adult guidance when appropriate (e.g., engages in problem-solving)	3
Expresses curiosity and eagerness for learning (tries new activities, asks questions)	3
Engages with books (knows where a book starts, associates print with storyline, pretends to read)	2
Has general coordination on playground (kicking balls, running, climbing)	1
Engages in symbolic / imaginative play with self or peers (plays house, fire station)	1
Has expressive abilities (tells about a story or experience in response to a prompt)	0
Can recognize rhyming words ("Shoe rhymes with Glue. Does Blue rhyme with Glue? Does Dog?")	0
Expresses empathy or caring for others (e.g., consoles or comforts a friend who is crying)	0

Source: Teacher Survey on Importance of Readiness Skills (2009).

Note: Scores are based on 29 teachers.

A Closer Look at What Skills Are Easiest to Impact

Teachers were also asked to check the five skills that they considered to be easiest to impact during the kindergarten year. Skills in the *Kindergarten Academics* cluster received the most top ratings, with teachers identifying the following skills as easiest to impact: *Can count 10 objects*

correctly, Recognizes three primary shapes, and *Recognizes eight primary colors.* No teachers felt it was easy to impact skills related to performing self-help/self-care tasks, staying focused, expressing empathy or handling frustration.

Figure 97. Skills Selected as a Top Five Easiest Skill to Impact

School Readiness Skills	Number of teachers selecting
Can count 10 objects correctly ("Please give Maria 5 crayons" or "Please put 10 blocks in the basket")	19
Recognizes three primary shapes (circle, triangle square)	16
Recognizes eight primary colors (Crayola basic 8: red, orange, yellow, green, blue, purple, brown, black)	15
Engages with books (knows where a book starts, associates print with storyline, pretends to read)	14
Recognizes the letters of the alphabet (note: may be CAPs, lowercase or combination)	13
Writes own first name (spelling and writing all letters correctly)	10
Participates successfully in circle time (listens, focuses, sits still, engages)	9
Can recognize rhyming words ("Shoe rhymes with Glue. Does Blue rhyme with Glue? Does Dog?")	6
Works and plays cooperatively with peers (takes turns and shares, helps others)	6
Use of small manipulatives such as crayons, paintbrush, buttons, zippers, etc.	5
Expresses curiosity and eagerness for learning (tries new activities, asks questions)	4
Follows one- to two-step directions	4
Has expressive abilities (tells about a story or experience in response to a prompt)	4
Engages in symbolic / imaginative play with self or peers (plays house, fire station)	3
Appropriately expresses needs and wants verbally in primary language	2
Has general coordination on playground (kicking balls, running, climbing)	1
Relates appropriately to adults other than parent/primary caregiver (converses with, seeks help from)	1
Controls impulses and self-regulates (is not disruptive of others or class)	1
Comforts self, using adult guidance when appropriate (e.g., goes to quiet area when upset; identifies emotion s/he is feeling)	1
Negotiates with peers to resolve social conflicts, using adult guidance when appropriate (e.g., engages in problem-solving)	1
Performs basic self-help/self-care tasks (toileting, eating, washing hands)	0
Stays focused / pays attention during activities	0
Expresses empathy or caring for others (e.g., consoles or comforts a friend who is crying)	0
Handles frustration well	0

Source: Teacher Survey on Importance of Readiness Skills (2009).

Note: Scores are based on 27 teachers.

A Closer Look at Where Teachers Spend the Most Time

Teachers were also asked to check the five skills on which they spent the most classroom time.

The highest number of teachers reported spending most of their time on the following skills: *Negotiates with peers to resolve social conflicts, Recognizes the letters of the alphabet*, and *Stays focused/pays attention during activities.* A number of skills in the *Self-Care & Motor Skills* and *Social Expression* domains were not chosen by any teachers as requiring a great deal of time from them.

Figure 98. Skills Selected as a Top Five on Which Teachers Spend the Most Time

School Readiness Skills	Number of teachers selecting
Negotiates with peers to resolve social conflicts, using adult guidance when appropriate (e.g., engages in problem-solving)	20
Recognizes the letters of the alphabet (note: may be CAPs, lowercase or combination)	18
Stays focused / pays attention during activities	17
Works and plays cooperatively with peers (takes turns and shares, helps others)	12
Controls impulses and self-regulates (is not disruptive of others or class)	11
Participates successfully in circle time (listens, focuses, sits still, engages)	9
Can recognize rhyming words ("Shoe rhymes with Glue. Does Blue rhyme with Glue? Does Dog?")	9
Handles frustration well	9
Follows one- to two-step directions	8
Has expressive abilities (tells about a story or experience in response to a prompt)	8
Can count 10 objects correctly ("Please give Maria 5 crayons" or "Please put 10 blocks in the basket")	6
Use of small manipulatives such as crayons, paintbrush, buttons, zippers, etc.	4
Appropriately expresses needs and wants verbally in primary language	4
Engages with books (knows where a book starts, associates print with storyline, pretends to read)	4
Comforts self, using adult guidance when appropriate (e.g., goes to quiet area when upset; identifies emotion s/he is feeling)	2
Relates appropriately to adults other than parent/primary caregiver (converses with, seeks help from)	2
Engages in symbolic / imaginative play with self or peers (plays house, fire station)	1
Writes own first name (spelling and writing all letters correctly)	1
Has general coordination on playground (kicking balls, running, climbing)	0
Performs basic self-help/self-care tasks (toileting, eating, washing hands)	0
Expresses curiosity and eagerness for learning (tries new activities, asks questions)	0
Recognizes eight primary colors (Crayola basic 8: red, orange, yellow, green, blue, purple, brown, black)	0
Recognizes three primary shapes (circle, triangle square)	0
Expresses empathy or caring for others (e.g., consoles or comforts a friend who is crying)	0

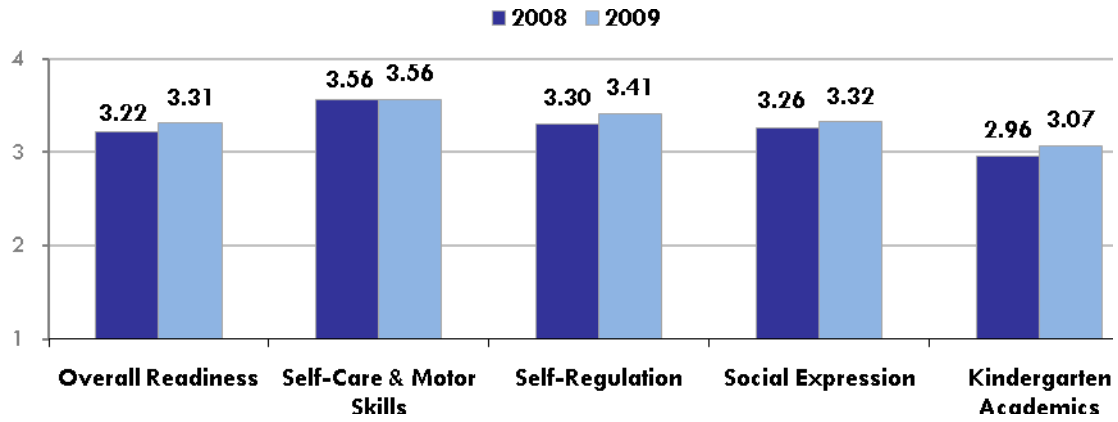
Source: Teacher Survey on Importance of Readiness Skills (2009).

Note: Scores are based on 29 teachers.

How Did the 2008 and 2009 Samples Compare?

Eighteen of the 30 teachers involved in the 2009 readiness assessment also participated in 2008. Even with so many returning teachers, there were some differences in perceptions of readiness across the two samples. The figure that follows shows that teachers in the 2009 sample had slightly higher expectations for students coming into kindergarten than the 2008 teacher sample did – particularly in their expectations for students' *Self-Regulation* and *Kindergarten Academics* skills.

Figure 99. Comparing 2008 and 2009 Samples on Teachers' Desired Levels of Proficiency



Source: Teacher Survey on Importance of Readiness Skills (2008, 2009).

Note: Scores are based on 37 teachers in 2008 and 30 teachers in 2009.

In other comparisons, teacher priorities regarding the most important, easiest-to-change, and most time consuming skills shifted slightly, but the overall story – particularly regarding *Self-Regulation* skills – remains the same. In both assessment years, teachers, generally felt that *Self-Regulation* was very important, relatively difficult to change, and required more of their time than other skills.

Section Summary

Most teachers in the assessment were teaching in full or extended day monolingual English-speaking classrooms. More than half (59%) were Caucasian, and thirty-nine percent were bilingual. The teachers were an experienced group, with an average of over 16 years in elementary education, and almost nine years in kindergarten specifically.

When teachers were asked to choose the skills they felt were most important for kindergarten entry, the foundational *Self-Care & Motor Skills* were seen as the most important, followed closely by *Self-Regulation* skills. Perhaps because there is such a gap between students' skills in *Self-Regulation* and teachers' desired proficiency levels on these skills, teachers also felt they spent the most time on *Self-Regulation* in their classroom – even more than on the *Kindergarten Academics* skills.

About the Researcher

ASR is a nonprofit, social research firm dedicated to helping people build better communities by creating meaningful evaluative and assessment data, facilitating information-based planning, and developing custom strategies. Incorporated in 1981, the firm has over 28 years of experience working with public and private agencies, health and human service organizations, city and county offices, school districts, institutions of higher learning, and charitable foundations. Through community assessments, program evaluations, and related studies, ASR provides the information that communities need for effective strategic planning and community interventions.

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