



RESULTS OF THE 2015 FALL ASSESSMENT

# SCHOOL READINESS

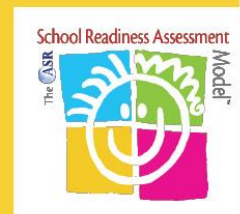
in Sacramento County

EXECUTIVE SUMMARY

Funding provided by:



Produced by:



## WHY WAS THIS STUDY CONDUCTED?

This study is the fourth kindergarten readiness assessments across the network of Sacramento area elementary schools served by First 5. Beginning in 2012, their purpose is to help First 5 and its partners understand how ready students and their families are for kindergarten across the network and to identify the links between readiness and other aspects of child and family development that First 5 addresses. Results may be used to examine ways that First 5 may better target resources and services to address factors that promote or hinder children’s readiness across the First 5 Sacramento network.

## WHAT DID WE LEARN? KEY FINDINGS AT A GLANCE

| Research Question   | Findings   | Data Highlights  |
|---|--|--|
| <b>How ready are children across the First 5 Sacramento network of schools?</b>                       | <p>The average K student in 2015 was just above the <i>In Progress</i> level: <b>3.23 out of 4.00</b></p> <p><b>Thirty-six percent</b> of children were <i>Ready in All Areas</i> for kindergarten</p>   | <ul style="list-style-type: none"> <li>For each individual readiness skill, children were scored on a scale from <i>Not Yet</i> (1) to <i>Proficient</i> (4). Average scores for each of four <i>Basic Building Blocks of Readiness</i> range from 1 to 4.</li> <li>Across years, scores were lowest in <i>Kindergarten Academics</i> and highest in <i>Motor Skills</i>.</li> <li>Children were considered <i>Ready in All Areas</i> if they had high scores across domains of readiness.</li> </ul>  |
| <b>How ready are families to support their children’s readiness?</b>                                  | <p>High rates of:</p> <ul style="list-style-type: none"> <li>Health insurance, health and dental homes</li> <li>Health and developmental screenings</li> <li>Parents working with child on school skills</li> <li><i>Receipt of information about school readiness</i></li> </ul>                            | <ul style="list-style-type: none"> <li>99 percent of parents said their children were insured.</li> <li>98percent of children have a regular doctor and 91 percent have a regular dentist.</li> <li>The percentage of children who had received screenings before kindergarten was 85% for vision, 82% for hearing, and 43% for developmental.</li> <li>60 percent worked on school skills with their child.</li> <li>Approximately three-quarters of parents reported receiving information about readiness topics such as skills needed for kindergarten and how to develop those skills and how to register for kindergarten</li> </ul> |
| <b>What are the major factors or “predictors” of readiness across the First 5 Sacramento network?</b> | <ul style="list-style-type: none"> <li>Child Well-Being</li> <li>Child’s Age</li> <li>Attended preschool or TK</li> <li>Readiness Activities</li> <li>Special Needs</li> <li>Gender</li> <li>Less screen time</li> <li>Reading at Home</li> <li>Less Parenting Strain</li> <li>Mother’s Education</li> </ul> | <ul style="list-style-type: none"> <li>Most of the strongest “predictors” of readiness in Sacramento County (hunger, fatigue, age, gender, and special needs) were largely the same as those found in national assessments of kindergarten readiness as well as the 2012-2014 Sacramento studies.</li> <li>Parent and home factors included readiness activities, reading at home and less screen time. Parenting strain and mother’s education were weaker, but still significant, factors.</li> </ul>  |

## HOW WAS THE STUDY CONDUCTED?

### Sample

The sample of schools and classrooms was drawn by First 5 Sacramento staff to cover the entire First 5 service area, particularly those schools whose incoming kindergartners and their families were most likely to have been provided First 5 school readiness services in recent years. The sample was designed to reflect the First 5 Sacramento target population and service network, which covers parts of nine districts: Sacramento City, Twin Rivers, Elk Grove, Natomas, River Delta, Folsom Cordova, Galt, Robla, and San Juan school districts. The sample was not designed to be representative or generalizable to the county at large or any individual district or school. The 2015 study comprised **88 kindergarten classrooms** from **40 elementary schools** across the county. In all, **1,915 individual student assessments** were completed. The figure below details the overall demographics of kindergarten students and their families across the First 5 network who were assessed in Fall 2015. The make-up of the current sample was similar to that of previous years (see full report for details), except that a higher percentage of mothers in the current year had not graduated from high school (25% in 2014 compared to 12% in both 2012 and 2013).

#### Demographics of Sampled Kindergartners and their Families, 2015

|                               | 2015 |
|-------------------------------|------|
| <b>Gender</b>                 |      |
| Boys                          | 50%  |
| Girls                         | 50%  |
| <b>Race/Ethnicity</b>         |      |
| Latino/Hispanic               | 36%  |
| African American              | 16%  |
| White                         | 14%  |
| Asian                         | 15%  |
| Multiple race/ethnicity       | 17%  |
| Filipino                      | 1%   |
| Other                         | 2%   |
| <b>English Learners</b>       | 37%  |
| <b>Special Needs Students</b> | 5%   |
| <b>Family Income</b>          |      |
| \$0-\$14,999                  | 36%  |
| \$15,000-\$34,999             | 37%  |
| \$35,000+                     | 27%  |
| <b>Mother's Education</b>     |      |
| Less than HS                  | 25%  |
| High School                   | 33%  |
| Some College                  | 28%  |
| College Degree                | 14%  |

Source: Kindergarten Observation Form 2015; Parent Information Form 2015

Note: N=1,277-1,905

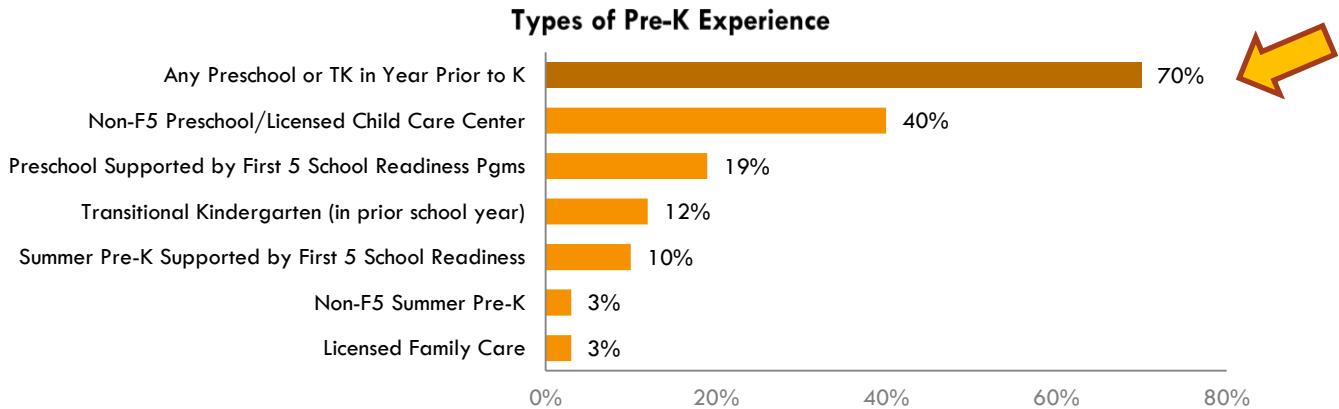
### Instruments and Data Sources

Three primary instruments and data sources were used in this study. The *Kindergarten Observation Form (KOF)* was completed by teachers to record their observations of child readiness and the *Parent Information Form (PIF)* was completed by parents and guardians to provide information about their children and family background. First 5 service and participation records for children and their parents were obtained from Persimmony, the data system into which First 5 contractors enter data about clients and services received.

## A PROFILE OF KINDERGARTEN CHILDREN ASSESSED

### 70 Percent of Children Attended Preschool or Transitional Kindergarten

Seventy percent of students attended a preschool, licensed childcare center, or transitional kindergarten (TK) in the year before they started kindergarten. The majority of these children attended preschool, 12% attended TK, and some attended both.



Source: Kindergarten Observation Form 2015, Parent Information Form 2015, First 5 service records.

Note: N=1,356-1,683.. Some children attended both preschool and TK. Summer pre-k not included within "Any Preschool in Year Prior to K."

### A Majority of Children Have Access to Regular Health Care, Dental Care, and Health Screenings

Overall there was no discernable shift in children's access to health and dental care from 2014 to 2015, according to parents. The majority of children received vision, and hearing screenings, many through First 5-funded services.

- **99%** had health insurance
- **98%** had a regular doctor
- **91%** had a regular dentist
- **87%** had a dental exam in last year
- **24%** had at least three cavities before kindergarten
- **10%** missed school due to dental issue
- **43%** received a developmental screening
- **85%** received a vision screening
- **82%** received a hearing screening

### Most Children Were Well-Rested, Well-Fed, and Healthy

During the first month of school, most students appeared to their teachers be well-rested, well-fed, and healthy, and had good attendance most days.

- **19%** of students appeared **tired** during class at least on some days.
- **14%** said they were **hungry** at least on some days.
- **10%** were **sick or ill** during school at least on some days.
- **Less than 1%** reported a **toothache** or mouth pain at least on some days.
- **18%** of students were **absent** from class at least on some days.
- **12%** of students were **tardy** to class at least on some days.

## FAMILY LIFE AND PARENT ENGAGEMENT

Parents in 2015 generally reported the same degree of engagement and support with their children as parents did in 2012-2014.

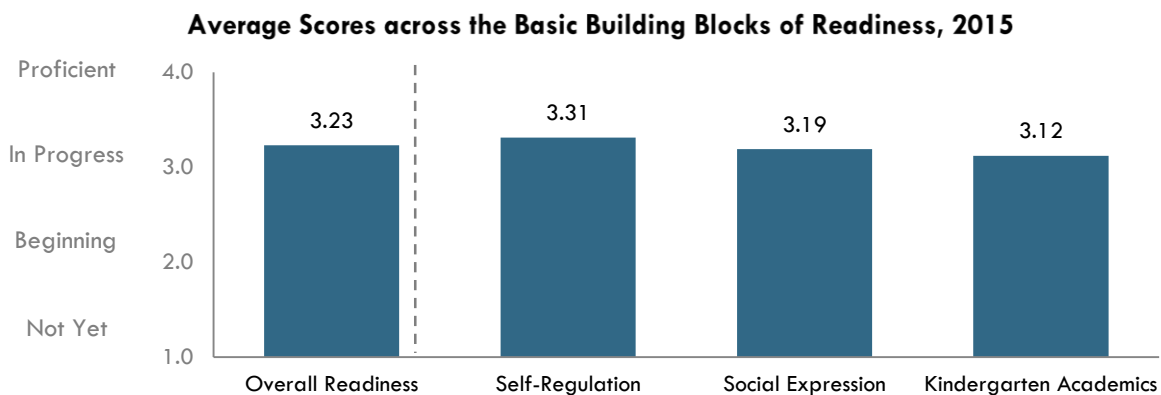
- **69%** of all families rely on WIC for support.
- **56%** of children watched two or fewer hours of TV and videos per day during the school week, but only **34%** were limited to this amount of TV on weekends.
- **45%** of parents read to their children for more than five minutes at least five days per week.
- **60%** worked on school skills with their children.
- **50%** of families visited a library in the past year.
- **41%** met with their child’s kindergarten teacher.

Across all four readiness studies, **higher-income families** (those earning \$35,000 or more) made use of various community resources and engaged in readiness activities more frequently than lower-income families.

## KINDERGARTEN READINESS

### *The Average Kindergarten Student is **In Progress***

For each individual readiness skill, children were scored on a scale from *Not Yet* (1) to *Proficient* (4). In 2015, the average overall readiness score across the First 5 network was **3.23**—just above the benchmark for *In Progress*. Students were similarly *In Progress* on overall readiness in the two prior study years<sup>1</sup>. Scores for each of four domains, or Building Blocks, of readiness were also calculated. As was found in Sacramento’s prior readiness studies, scores were lowest in *Kindergarten Academics* (e.g., counting, recognizing basic shapes and colors, rhyming). Scores for *Self-Regulation* (e.g., staying focused, following rules, handling frustration well) was highest, and *Social Expression* (e.g., expressing needs and wants, expressing empathy) fell in between.



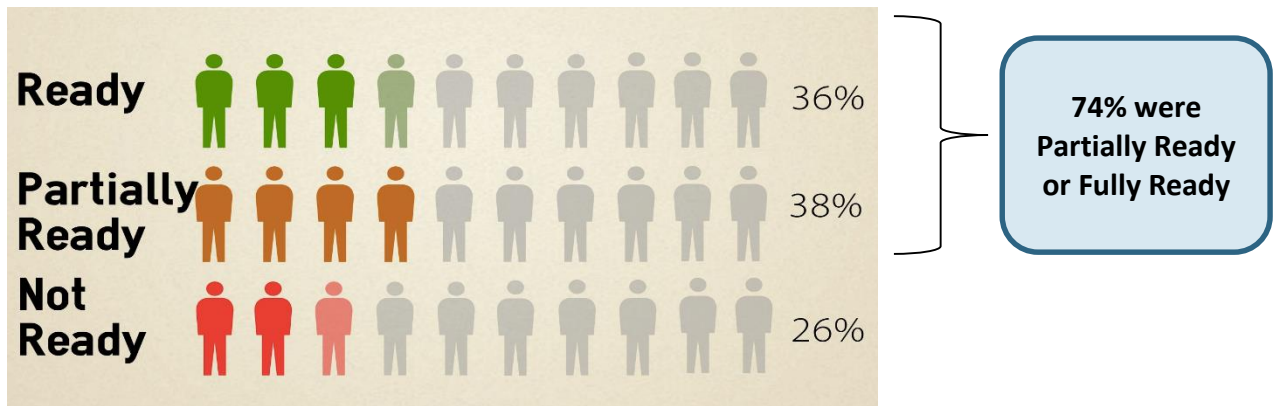
Source: Kindergarten Observation Form 2015. N=1,801-1,912.

<sup>1</sup> The KOF was revised in 2014, which makes it inappropriate to compare raw readiness scores from year to year. Also, because several of the items on the KOF were aligned with the kindergarten Common Core State Standards (skills children are expected to acquire by the end of the school year), we did not expect students to be fully proficient on all skills at the time of the assessment.

### Just Over One-Third of Students Are Ready in All Areas

Students were considered “ready” for Kindergarten if they scored at or above 3.25 on all Building Blocks, meaning they were *Proficient* or nearing proficiency on *Self-Regulation*, *Social Expression*, and *Kindergarten Academics*. Using these criteria, **36 percent** of the sample were *Ready* for kindergarten, while another 38 percent were *Partially Ready*, having scored at or above 3.25 on some but not all of the *Building Blocks*. The remaining 26 percent were *Not Ready*, having scored below 3.25 on all three *Building Blocks*. There is a smaller percentage of students in the Partially Ready group this year (and a slightly higher percentage in the Not Ready category) because Motor Skills was not used as a separate *Building Block* this year.

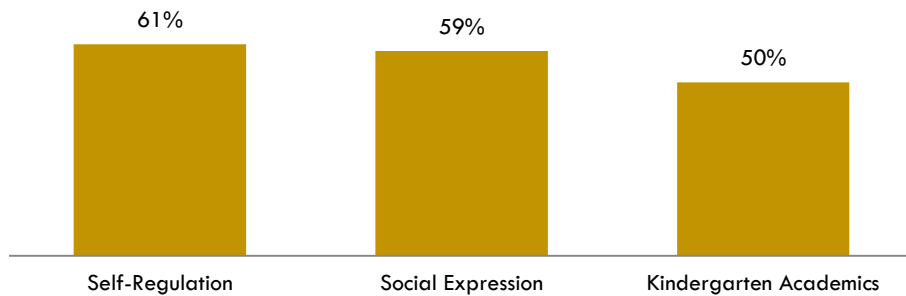
#### Percent Ready for Kindergarten, 2015



Source: Kindergarten Observation Form 2015. N=1,801

When each *Building Block* is considered separately, we find that most children are “ready” (i.e., score at or above 3.25) about 60 percent of the children were “ready” on *Self-Regulation* and the same proportion were “ready” on *Social Expression*. Half of the sample was “ready” on *Kindergarten Academics*.

#### Percent Ready in Each Building Block, 2015

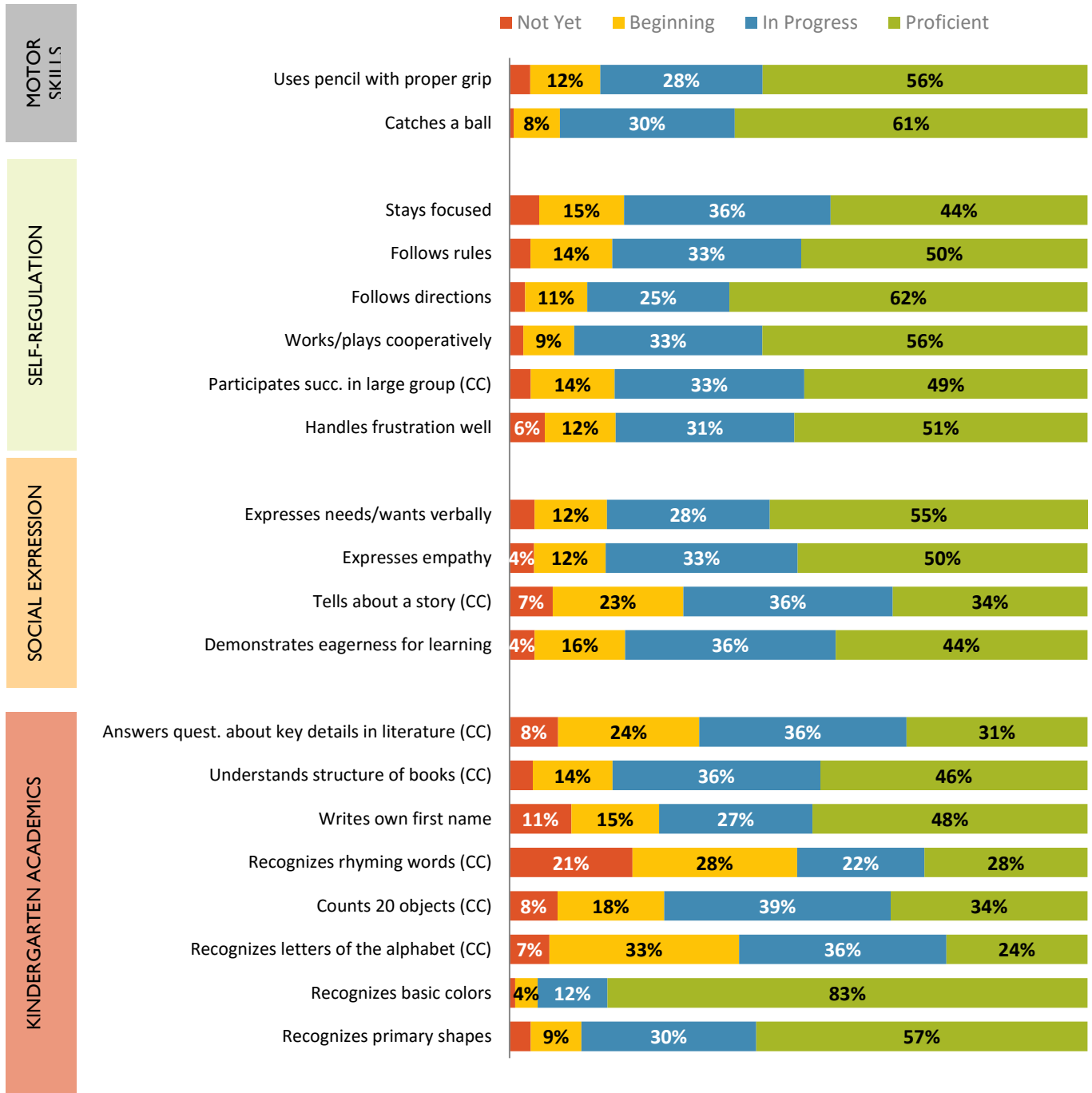


Source: Kindergarten Observation Form 2015. N=1,802-1,912.

### Kindergarten Students Skills Vary Across the Building Blocks of Readiness

The figure on the next page shows the percentage of children scoring at the *Not Yet*, *Beginning*, *In Progress*, and *Proficient* levels across all 20 readiness skills. Most students were proficient in recognizing basic colors, while relatively few were proficient in recognizing all letters of the alphabet. Some of the skills below are aligned with the Common Core State Standards, which children are expected to meet by the end of the school year; therefore, students were not expected to be proficient on all of these skills at the time of the assessment.

### Percentage of Children at Each Proficiency Level Across Readiness Skills, 2015

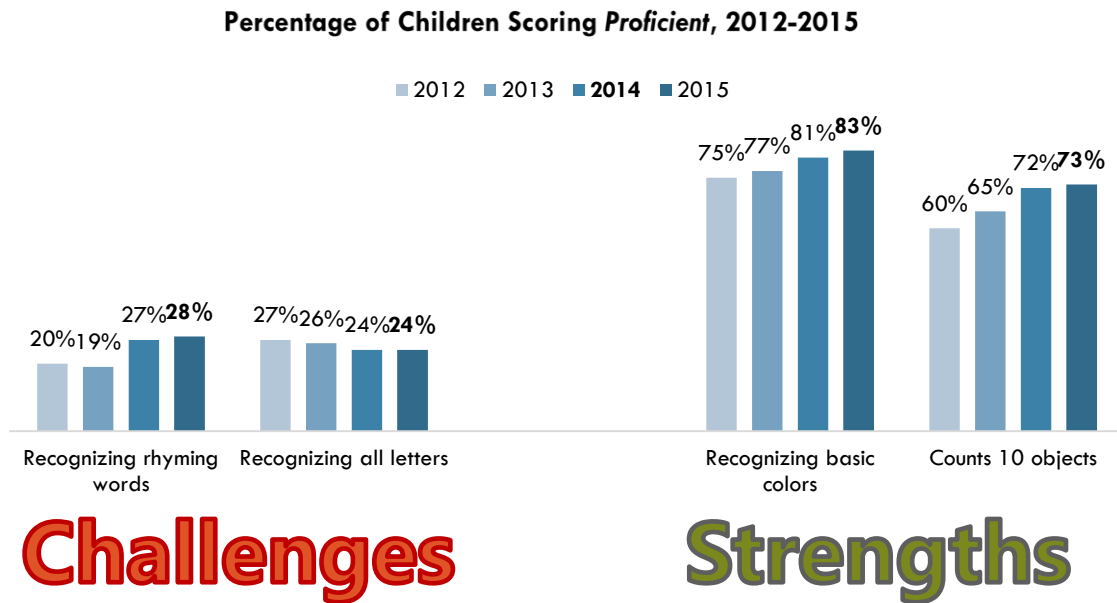


Source: Kindergarten Observation Form 2015. N=1,742-1,912. Note: Proportions of less than 5% are not labeled. Percentages may not sum to 100 due to rounding. Scores were omitted for language-dependent items when language barriers were a concern. CC=Item is aligned with Common Core Standard.

### Greatest Strengths and Challenges across Years

While there was some variation over time in the percent of children scoring *Proficient* on each of the readiness items, children consistently showed strengths in certain areas over others. Specifically, children across all four years

were strong in counting and recognizing basic colors, but had room for growth in knowing their letters and recognizing rhymes<sup>2</sup>. With the exception of letter recognition, a greater proportion of students were proficient in the current year on each of these items.



Sources: Kindergarten Observation Form 2012-2015. N=1565 (2012); 1320-1540 (2013); 1,598-1,843 (2014), 1,780-1,801(2015). Note: The 2014 and 2015 counting item (counts 20 objects) was recoded here to compare proficiency in 2014 and 2015 to prior years. The administration of this item was adjusted in 2014, likely accounting for the difference in student performance between 2013 and 2015.

## STRONGEST PREDICTORS OF READINESS

The following chart displays the predictors significantly associated with overall kindergarten readiness scores across the First 5 network, in order of predictive strength. Like last year, the single largest predictor of readiness was **child well-being**. Children who came to school well-rested and well-fed had significantly higher readiness scores than children who did not. Child’s age had nearly as strong a link with readiness, such that children who were older when they entered kindergarten had higher readiness scores.

**Preschool or transitional kindergarten attendance** was the third largest predictor, such that children who attended a licensed preschool—both First 5-supported and other facilities—or transitional kindergarten had higher readiness scores.

Several other child demographics were related to higher readiness skills, including **age, gender, and special needs**. Older children had higher readiness scores than their younger peers, holding constant all other predictors. Likewise, girls had higher readiness scores than boys, and children without special needs had higher scores than those with a diagnosed disability.

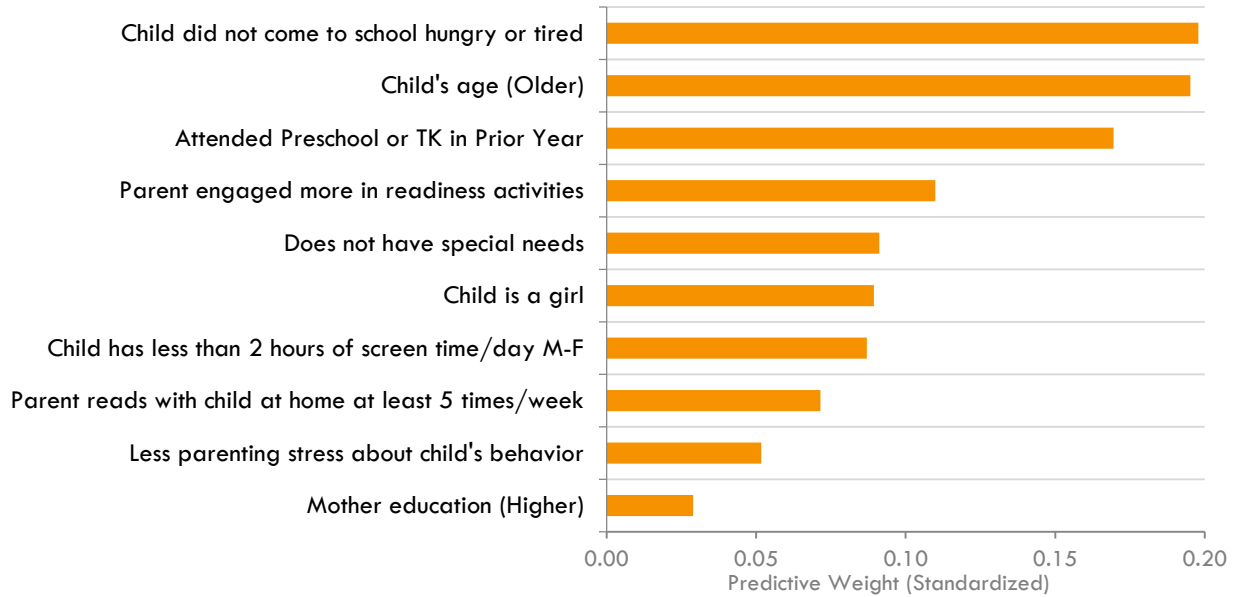
Finally, three parent-related factors were significantly associated with readiness. Specifically, mothers with higher **educational attainment** (more than a high school degree) had children with higher readiness skills. Controlling for other factors, including maternal education, parents who engaged in a greater number of **school readiness activities** (e.g., working on school skills with the child, meeting the child’s teacher, attending a parent orientation or meeting, reading books about kindergarten) also had children with significantly higher readiness scores. Children

<sup>2</sup> As rhyming is a Common Core-aligned skill to be learned by the end of kindergarten, we did not expect all entering kindergartners to be proficient on this item.



whose families read with them at least five times a week had higher readiness scores than those who read less frequently. Additionally, we found that parents who reported having lower levels of **parenting strain related to their child’s behavior** had children with stronger readiness skills.

**Strongest Predictors of Overall School Readiness (in order of strength)**

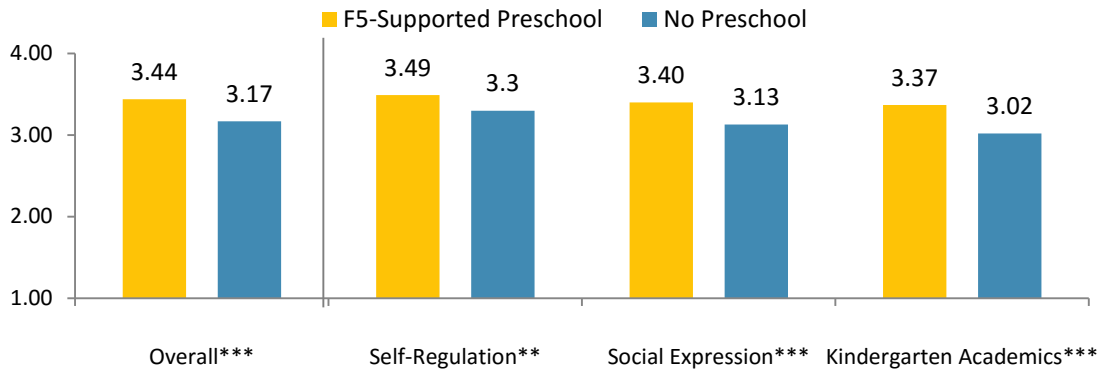


Source: Kindergarten Observation Form 2015, Parent Information Form 2015, First 5 service records. N=1001. R<sup>2</sup>=0.20.

**What are the Specific Gains in Kindergarten Readiness Associated with First 5 Preschool Attendance?**

The following figure displays the differences in readiness scores children who attended a First 5-supported preschool compared to children who did not attend any preschool, after adjusting for other factors linked to readiness, including child and family demographics. Children who attended preschools supported by First 5 readiness services had significantly higher overall readiness scores than children who did not attend preschool. These children also had significantly higher *Self-Regulation*, *Social Expression*, and *Kindergarten Academics* scores (the analysis was not conducted for motor skills, as this block was comprised of only two items). Although the differences here appear small, they are significant because they apply to large numbers of children.

**Readiness Scores, by F5 Preschool Experience (Adjusted for Other Child/Family Factors)**

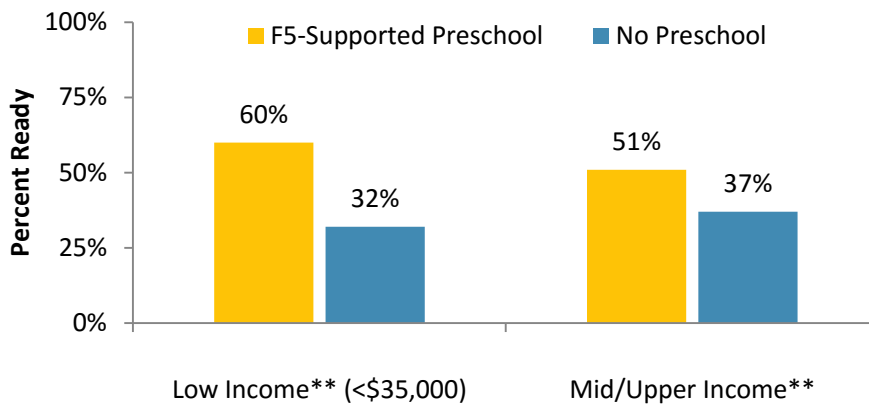


Source: Kindergarten Observation Form 2015, First 5 service records.

Note: N=610. \*Statistically significant at p<.05; \*\*statistically significant at p<.01; \*\*\*statistically significant at p<.001.

The figure below shows the percentage of children ready by preschool attendance and income, adjusting for other factors. As shown in the figure, the boost from attending a First 5-supported preschool is larger for low-income children compared to middle/upper income children. The difference in the percent ready between those who attended a F5-supported preschool and those who did not attend preschool is 28% among low-income children and 14% for middle and upper income children.

**Percent Ready for School, By F5-Supported Preschool Experience and Income (Adjusted for Other Child/Family Factors)**



Source: KOF, PIF, First 5 Records 2015. N=618. \*\*Significant at p<.01; \*\*\*Significant at p<.001.

Note: Low income: <\$35K. Mid/Upper income: \$35K+

**Other First 5 School Readiness Services and Readiness**

There was a greater association between First 5-funded school readiness services and readiness when looking specifically at low-income children. Among the full sample, there were no significant associations between specific First 5 school readiness services and readiness (although some approached significance). Among low-income children, although many of the associations between services and readiness were not significant, there were some that were significant or approached significance (after adjusting for other important factors):

- **Hearing and vision screenings** were significantly associated all measures of readiness.

- **Family Literacy** was significantly associated with *Overall Readiness* and approached significance for *Kindergarten Academics* and *Self-Regulation*.
- The relationship between **Parent Education** and *Kindergarten Academics* approached significance.
- The association with *Overall Readiness* and *Self-Regulation* approached significance for **playgroups**.

Among low-income children, receiving at least one school readiness service other than preschool was associated with increased likelihood of being *Ready* for kindergarten. That is, children who received at least one of these other services (such as a screenings, family literacy, or playgroups) had 45% greater odds of scoring at least 3.25 on all three *Building Blocks* of readiness, after controlling for other demographic factors and preschool attendance. While 36% of low-income children who did not receive other school readiness services were *Ready*, 46% of those who did receive at least one of these other services were *Ready*.

Additionally, the number of non-preschool school readiness services was significantly associated with *Overall Readiness*, such that children who had received more of these services had higher readiness, controlling for other factors.

## SUMMARY OF THE KEY TAKE-AWAYS

### ***The average child's readiness for kindergarten in 2015 was In Progress.***

Using a four-point scale of readiness (1=*Not Yet*, 4=*Proficient*), the overall average readiness score across all 20 items was **3.23** across the First 5 network – just above the benchmark for *In Progress*. Students were similarly *In Progress* in 2012-2014.

Approximately **one-third** of incoming kindergarten students in all four years were considered *Ready in All Areas* for school, which is similar to previous years. In 2015, 36 percent were designated *Ready in All Areas* by scoring at least 3.25 on all domains of readiness. The children who were not yet ready tended to have room for growth in *Kindergarten Academics* and *Social Expression*.

### ***Most families across years were low-income, and these families were less likely to engage in family activities and utilize local community resources.***

Children in the study came from relatively disadvantaged households, which may have implications for their exposure to enrichment activities and resources prior to kindergarten. In 2015, 36 percent of families earned less than \$15,000 per year, while another 37 percent earned between \$15,000 and \$35,000 per year. The federal poverty threshold is \$23,550, meaning that a large percentage of families in the study were likely in poverty. Families earning under \$35,000 engaged in fewer readiness activities with their children (e.g., working on school skills), and used fewer local resources (e.g., parks and libraries). Engagement in readiness activities, in turn, was related to school readiness, even after holding income constant.

### ***About 70 percent of children of children assessed attended preschool or transitional kindergarten***

Data collected from the *PIF*, *KOF*, and First 5 show that in the year preceding kindergarten, **70 percent** of students had attended preschool or transitional kindergarten (TK). Of those who attended preschool in 2015 (and were assessed), about 19 percent attended a First 5-funded preschool, while 40% percent attended another preschool or licensed child care program.

***Participation in First 5-supported preschools was associated with higher levels of readiness across all four readiness studies (2012-2015) in Sacramento.***

In addition to common predictors of kindergarten readiness (e.g., well-being, age, mother's education, gender, special needs status) regression analyses found that preschool attendance, including attendance at First 5-supported preschools, increased a child's likelihood of being ready for school in all three readiness studies. The benefit of attending a First 5-supported preschool was particularly large for children from low-income families.

***Other types of First5-funded readiness services were most beneficial for children from low-income families***

Other (non-preschool) readiness services were most strongly associated with readiness for low-income children. Specifically, hearing and vision screenings were significantly associated with all aspects of readiness, and participation in family literacy programs was linked with greater *Overall Readiness*. Among low-income children, receiving at least one school readiness service other than preschool was associated with increased likelihood of being *Ready* for kindergarten. Additionally, the number of non-preschool school readiness services was significantly associated with *Overall Readiness*, such that children who had received more of these services had higher readiness, controlling for other factors.

## ABOUT THE RESEARCHERS

Applied Survey Research 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 30 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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