

IN SACRAMENTO COUNTY

RESULTS OF THE 2014 FALL ASSESSMENT

Executive Summary







WHY WAS THIS STUDY CONDUCTED?

This study is the third 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 hinder children's readiness across the First 5 Sacramento network.

WHAT DID WE LEARN? KEY FINDINGS AT A GLANCE

Research Question	Findings	Data Highlights
How ready are children across the First 5 Sacramento network of schools?	The average K student in 2014 was just above the <i>In Progress</i> level: 3.20 out of 4.00	 For each individual readiness skill, children were scored on a scale from Not Yet (1) to Proficient (4). Average scores for each of four Basic Building Blocks of Readiness range from 1 to 4.
	One-third of children were Ready in All Areas for kindergarten	 Across years, scores were lowest in Kindergarten Academics and highest in Motor Skills. Children were considered Ready in All Areas if
		they had high scores across domains of readiness.
How ready are families to support their children's readiness?	High rates of:	 99 percent of parents said their children were insured.
	 Health insurance, health and dental homes 	 97 percent of children have a regular doctor and 90 percent have a regular dentist. 75 percent had received a vision and/or hearing screening, while 53 percent of children had received a developmental screening before kindergarten.
	 Health and developmental screenings 	
	Parents working with child on school skills	
	on school skills	 58 percent worked on school skills with their child.
What are the major factors or "predictors" of readiness across the First 5 Sacramento network?	- Child Well-Being	 The strongest "predictors" of readiness in Sacramento County were largely the same as those found in national assessments of kindergarten readiness as well as the 2012 and 2013 Sacramento studies (e.g., well-being, gender, age, and special needs). Parents' feelings of support and their engagement in readiness activities with their children also related to higher readiness levels. Overall readiness was related to attending
	- Gender	
	Child's Age	
	Special Needs	
	 Mother's Education 	
	 Child Born Full-term 	
	 Parenting Support and Coping 	
	 Readiness Activities 	preschools supported by First 5 readiness
	 Preschools with F5 School Readiness Support 	 programs. Receipt of any First 5 services was also associated with being Ready in All Areas.
	Other Preschool	
	- Transitional Kindergarten	

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 2014 study comprised 79 kindergarten classrooms from 35 elementary schools across the county. In all, 1,849 individual student assessments were completed. The figure below details the overall demographics of kindergarten students and their families across the First 5 network in Fall 2014. 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, 2014

	2014
Gender	
Boys	51%
Girls	49%
Race/Ethnicity	
Latino/Hispanic	38%
African American	18%
Multiple race/ethnicity	15%
White	11%
Asian	10%
Hmong/Mien	6%
English Learners	39%
Special Needs Students	5%
Family Income	
\$0-\$1 <i>4,</i> 999	41%
\$1 <i>5,</i> 000-\$3 <i>4,</i> 999	37%
\$35,000+	22%
Mother's Education	
Less than HS	25%
High School	33%
Some College	28%
College Degree	14%

Source: Kindergarten Observation Form 2014; Parent Information Form 2014

Note: N=1,210-1,844

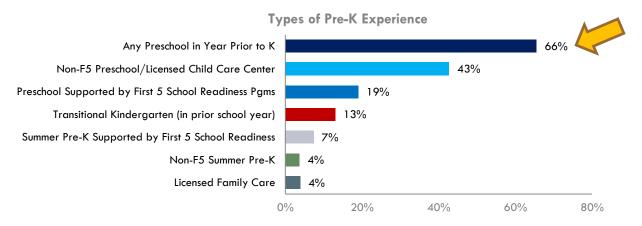
Instruments and Data Sources

Three primary instruments and data sources were used in this study. The *Kindergarten Observation Form* was completed by teachers to record their observations of child readiness and the *Parent Information Form* 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 Walter R. McDonald Associates, a First 5 Sacramento partner.

A PROFILE OF KINDERGARTEN CHILDREN ASSESSED

66 Percent of Children Attended Preschool

Sixty-six percent of students attended a preschool or licensed child care center in the year before they started kindergarten. This proportion was slightly lower than that found in 2012, when 68 percent of children had attended preschool, but higher than in 2013, when 64 percent of children had attended preschool. In 2014, 19 percent of the sample had been to First 5-supported preschools, and 44 percent had been to other preschools or child care centers. Thirteen percent of the 2014 sample had attended Transitional Kindergarten in the prior year.



Source: Kindergarten Observation Form 2014, Parent Information Form 2014, First 5 service records. Note: N=1,364-1,849. 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 2013 to 2014, according to parents. The majority of children received developmental, vision, and hearing screenings, many through First 5-funding services.

- 99% had health insurance
- 97% had a regular doctor
- 90% had a regular dentist
- 84% had a dental exam in last year
- 23% had at least three cavities before kindergarten

- 15% missed school due to dental issue
- 53% received a developmental screening
- 76% received a vision screening
- 75% received a hearing screening

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

During the first month of school, over 90 percent students appeared to their teachers be well-rested, well-fed, and healthy, and had good attendance most days.

- 12% of students appeared tired during class at least occasionally.
- 10% said they were hungry at least occasionally.
- 4% were sick or ill during school at least occasionally.

- Less than 1% reported a toothache or mouth pain at least occasionally.
- 8% of students were absent from class at least occasionally.
- 7% of students were tardy to class at least occasionally.

FAMILY LIFE AND PARENT ENGAGEMENT

Parents in 2014 generally reported the same degree of engagement and support with their children as parents did in 2012 and 2013.

- 71% of all families rely on WIC for support.
- 57% of children watched two or fewer hours of TV and videos per day during the school week, but only 31% were limited to this amount of TV on weekends.
- 43% of parents read to their children for more than five minutes at least five days per week.
- 58% worked on school skills with their children.
- 48% of families visited a library in the past year.
- 38% met with their child's kindergarten teacher.
- 13% of parents attended parent education classes.

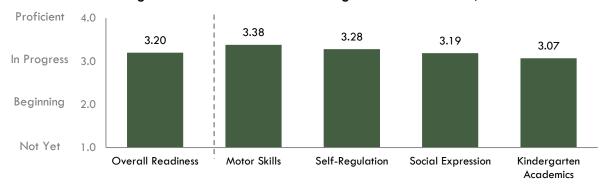
Across all three readiness studies, **higher-income families** (those earning \$35,000 or more) made use of various community resources and engaged in readiness activities more frequently than lower-income families.

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 2014, the average overall readiness score across the First 5 network was **3.20**—just above the benchmark for *In Progress*. Students were similarly *In Progress* on overall readiness in the two prior study years¹. 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 highest in the *Motor Skills*² Building Block and 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) and *Social Expression* (e.g., expressing needs and wants, expressing empathy) fell in between, with the average *Self-Regulation* score somewhat higher than the *Social Expression* score.

Average Scores across the Basic Building Blocks of Readiness, 2014



Source: Kindergarten Observation Form 2014. N=1,721-1,846.

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¹ The KOF was revised in 2014, which makes it inappropriate to compare raw readiness scores from year to year. For a year-to-year comparison of the items that did not change in 2014, see full report. 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.

² Note: Motor Skills in 2014 was comprised of only two items, "Uses a pencil with proper grip" and "Catches a ball".

About One-Third of Students Are Ready in All Areas

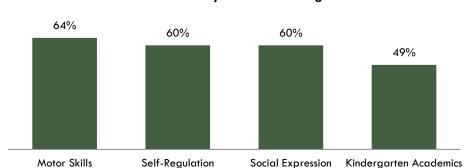
Students were considered "ready" in all areas if they scored at or above 3.25 on all Building Blocks, meaning they were *Proficient* or nearing proficiency on *Motor Skills, Self-Regulation, Social Expression,* and *Kindergarten Academics*. Using these criteria, **32 percent** of the sample were *Ready in All Areas* for kindergarten, while another 50 percent were *Ready in Some Areas*, having scored at or above 3.25 on some but not all of the Building Blocks. The remaining 18 percent were *Not Ready*, having scored below 3.25 on all four Building Blocks. These percentages were nearly identical to those found among children in the 2012 and 2013 readiness studies. Among children who were *Ready in Some Areas* in 2014, scores were lowest in *Kindergarten Academics*; children who were *Not Ready* scored lowest in *Social Expression*.

Ready in All Areas Ready in Some Areas Not Ready Ready Not Ready

Percent Ready for Kindergarten, 2014

Source: Kindergarten Observation Form 2014. N=1,714.

When each *Building Block* is considered separately, we find that most children are "ready" (i.e., score at or above 3.25) on the *Motor Skills* domain. About 60 percent of the children were "ready" on *Self-Regulation* and the same proportion were "ready" on *Social Expression*. However, just under half of the sample was "ready" on *Kindergarten Academics*.



Percent Ready in Each Building Block

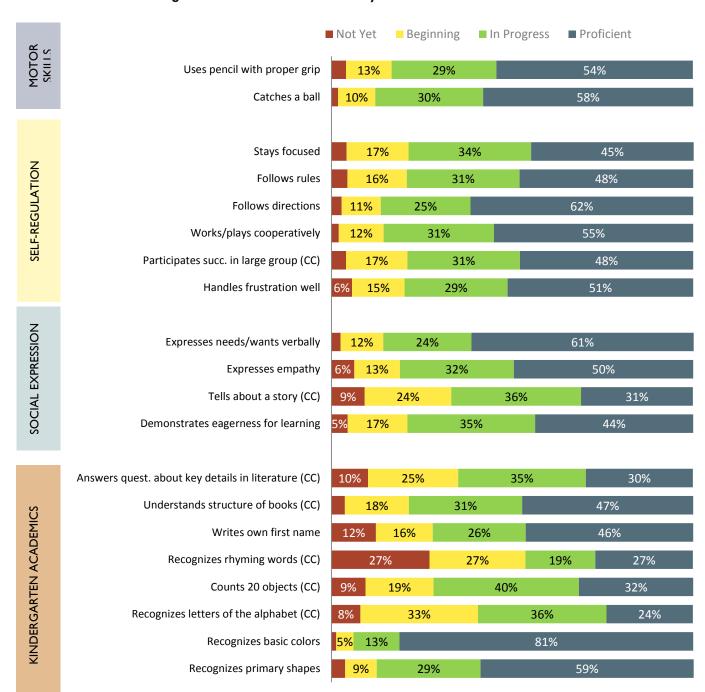
Source: Kindergarten Observation Form 2014. N=1,631-1,745.

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

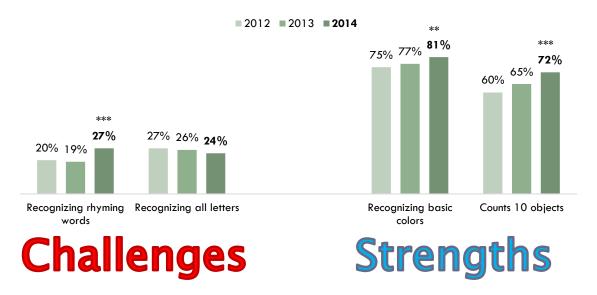


Source: Kindergarten Observation Form 2014. N=1,598-1,843. Note: Scores range from 1 (Not yet) to 4 (Proficient). Proportions of less than 5% are not labeled. Percentages may not sum to 100 due to rounding. CC=Item is aligned with Common Core Standard.

Greatest Strengths and Challenges across Years

While there was some variation in the percent of children scoring *Proficient* on each of the readiness items over the three study years, children consistently showed strengths in certain areas over others. Specifically, children across all three years were strong in counting and recognizing basic colors, but had room for growth in knowing their letters and recognizing rhymes. It is important to note, however, that the rhyming and letter recognition items are aligned with the Common Core end-of-year standards; therefore, we did not expect all children to be proficient on these skills. As the chart below shows, greater proportions of students were proficient in rhyming, recognizing basic colors, and counting over time, but slightly fewer children were proficient in letter recognition in 2014 compared to 2012 and 2013 (though this difference was not statistically significant).

Percentage of Children Scoring Proficient, 2012-2014



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

STRONGEST PREDICTORS OF READINESS

The chart below displays, in order of strength, the range of demographic factors and pre-kindergarten experiences that were most predictive of readiness across the First 5 network (independent of each other). As the chart indicates, children who were older, did not have a special need, and were born full-term had readiness scores that were significantly *higher* than those of other children. Girls and those with higher maternal education also had higher readiness scores. The strongest predictor of school readiness was child well-being. Children who came to school tired or hungry had significantly lower readiness scores than children who were well-rested and well-fed.

Several types of early experiences also predicted readiness. Children who attended preschool (both First 5-sponsored preschool and other types of licensed preschool or child care) demonstrated higher overall readiness scores than those who did not attend any preschool³. In addition, children who attended transitional kindergarten (TK; controlling for demographics and other early education experiences) had higher readiness levels. Finally, when parents had engaged in more readiness activities with their child (e.g., working on school skills, meeting the child's

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³ Although there was a slightly stronger association between readiness and attending a preschool not funded by First 5 relative to attending a First 5 preschool, we <u>cannot</u> conclude from this analysis that one type of preschool was better in preparing children for school than the other. Both preschool types were strongly and significantly associated with readiness.

kindergarten teacher) and when they felt they had strong parenting support (e.g., they had someone to talk to when they needed parenting advice), their children came to school better prepared.

Child did not come to school hungry or tired Attended other (not F5) preschool Child's age (Older) Attended First 5 preschool Does not have special needs Child is a girl Parent engaged more in readiness activities Child was born full-term Attended TK in prior year Mother education (Higher) Greater parenting support and coping skills 0 0.02 0.04 0.06 0.08 0.1 0.12 0.14 0.16 Predictive Weight (Standardized)

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

Source: Kindergarten Observation Form 2014, Parent Information Form 2014, First 5 service records. N=912. R²=.219.

Other Readiness Skill Areas Predicted by Participation in First 5 Services

In addition to the association between First 5-funded preschool and overall readiness, a deeper analysis of participation in specific First 5 services and readiness skills uncovered these links.

- Receiving at least one First 5 service⁴ was significantly related to being Ready in All Areas for kindergarten.
- Receiving a greater number of First 5 services predicted greater Kindergarten Academics skills, which included answering questions about key details in literature; understanding the structure and basic features of books; writing one's own first name; recognizing rhymes; counting; and recognizing colors, letters, and shapes.
- Receiving at least one type of First 5 screening service also marginally predicted higher levels of
 Kindergarten Academic skills and receiving a vision screening specifically predicted being Ready in All Areas
 for kindergarten.

What are the Specific Gains in Kindergarten Readiness that are Associated with First 5 Services?

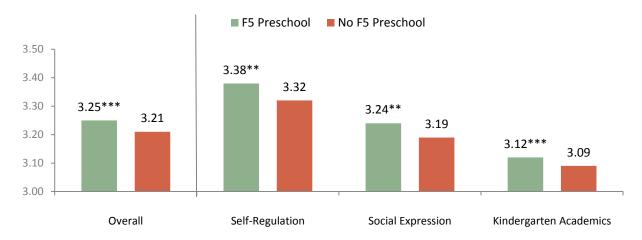
The chart below displays the difference between the scores for First 5 preschool participants compared to children who did not attend preschool after adjusting for other factors linked to readiness, including child and family demographics. Children who attended preschools supported by First 5 readiness services had significantly higher overall readiness scores than children who did not, after controlling for other child and family characteristics. These

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⁴ In 2014, 40 percent of the sample (737 children) received at least one type of First 5 service.

children also had significantly higher *Self-Regulation* scores and *Social Expression* scores (the analysis was not conducted for motor skills, as this block was comprised of only two items).

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



Source: Kindergarten Observation Form 2014, First 5 service records. Note: N=912. **Significant at p<.01; ***Significant at p<.01.

What Predictors of Readiness Did We Find Across All Three Years?

While there were some differences in the predictors of readiness found each year, several factors emerged as significantly associated with readiness in 2012, 2013, and 2014. The common characteristics and experiences that consistently predicted readiness included health and well-being, special needs, family socio-economic status, age, gender, and preschool attendance (including those who attended a First 5 preschool).

We also combined data from all three years to explore associations between First 5 services and readiness among participants in all three studies. This analysis yielded the following findings:

- Receiving a First 5 developmental screen predicted higher Self-Regulation scores.
- Participating in First 5 Summer Pre-K program predicted higher Kindergarten Academics scores.

SUMMARY OF THE KEY TAKE-AWAYS

The average child's readiness for kindergarten in 2014 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 **3.20** across the First 5 network – just above the benchmark for *In Progress*. Students were similarly *In Progress* in 2012 and 2013.

Approximately **one-third** of incoming kindergarten students in all three years were considered *Ready in All Areas* for school, the same proportion that were ready in prior years. In 2014, 32 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 2014, 41 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 66 percent of children across the First 5 network attended preschool.

Data collected from the *PIF*, *KOF*, and First 5 show that in the year preceding kindergarten, **66 percent** of students had attended preschool. This percentage is somewhat higher than that found in 2013 (64%), but slightly lower than that found in 2012 (68%). Of those who attended preschool in 2014, about 29 percent attended a First 5-funded preschool, while the remaining 71 percent attended another preschool or licensed child care program.

Participation in First 5-supported preschools was associated with higher levels of readiness across all three readiness studies 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. Furthermore, having received any type of First 5 service was associated with being *Ready in All Areas* for kindergarten in 2014.

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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