School Readiness Assessment
Special Report on Summer Pre-K and Common Core Skills
IN THE HAYWARD UNIFIED SCHOOL DISTRICT
—————— 2014 Comprehensive Report

Acknowledgements

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Snapshot of the 2014 Assessment

Background

In Fall 2014, kindergarten students and families in Hayward Unified School District participated in a comprehensive assessment that captured children's demographics, family background, pre-kindergarten experiences, and motor, socio-emotional, and academic skill development. The assessment measured the school readiness of children in the district and drew connections between readiness levels and children's backgrounds and experiences. In addition the study examined the link between participation in Hayward's Summer Pre-K (SPK) program and readiness. Finally, the study measured Hayward kindergarten students' baseline proficiency on skills aligned with the kindergarten Common Core standards. The key research questions and relevant findings are outlined in the chart below.

Findings

Research Question	Conclusion and Data Highlights
How ready for school are the sampled kindergarten students and their families?	• On a four-point scale of proficiency (1=*Not Yet* 2=*Beginning*, 3=*In Progress*, and 4=*Proficient*), Hayward students had an average score of 3.14, just above the **In Progress** benchmark. • Students were strongest in *Motor Skills* domain (3.25), and had the most room for growth in the *Kindergarten Academics* domain (3.04).
How many of these students are proficient or near proficiency across domains of readiness?	• **21%** of students were *Ready in All Areas*, having scored highly in the *Motor Skills, Self-Regulation, Social Expression,* and *Kindergarten Academics* domains. • **57%** were proficient on nearing proficiency on some, but not all domains. The remaining 22% were *Not Ready* across domains.

What family factors and child characteristics are associated with higher levels of school readiness?	• Children who had higher levels of readiness were more likely to
	   o Have attended licensed **preschool**,
	   o Be **read** to by their parent at least five times per week, and
	   o Be proficient in **English**.

What associations are there between SPK participation and school readiness?	• There were generally no significant differences in readiness between SPK participants and those who did not participate in SPK in 2014. • The number of days of SPK a child attended, however, correlated with several **Kindergarten Academics** skills.
Is there a difference in readiness levels associated with a 3-week model of SPK as compared to readiness levels associated with a 5-week model?	• Children who attended the 5-week SPK model had significantly higher readiness scores across domains than children without pre-K experience. • In contrast, the children attending a 3-week model did not differ in readiness from their peers with no pre-K experience. • A controlled experiment with a larger sample would be needed to confirm these findings
How far along are the sampled kindergarten students in their development of Common Core skills?	• On the same four-point scale used for assessing school readiness, children had an average score of 2.57 on the Common Core skills. Most students were just **Beginning** to demonstrate these skills.

Introduction

The current study had several purposes. First, it measured the school readiness of children in Hayward Unified School District and the relation of school readiness to family and child backgrounds and experiences. The study's second purpose was to evaluate the link between participation in Hayward's Summer Pre-K (SPK) program in 2014 and school readiness. Finally, the study measured Hayward kindergarten students' proficiency on skills aligned with the kindergarten Common Core standards. These three areas of study are defined and discussed below.

What is School Readiness?

School readiness is broadly defined as the set of physical, social/emotional, and academic skills students need to make a successful transition to kindergarten. Children's readiness for school can be further categorized into various domains or dimensions of development. In one of the early large-scale efforts to establish a common framework for addressing school readiness issues, the *National Education Goals Panel* (*NEGP*) organized school readiness skills into five domains: *Physical Well-Being & Motor Development, Social & Emotional Development, Approaches Toward Learning, Communication & Language Usage,* and *Cognition and General Knowledge.* More recent research conducted by ASR found that readiness skills measured by the *Kindergarten Observation Form* (*KOF*) reliably sort into four primary domains, termed the *Building Blocks of Readiness.* These *Building Blocks* overlap with, but are distinct from the *NEGP* dimensions: *Motor Skills, Self-Regulation, Social Expression,* and *Kindergarten Academics*.

Despite differences in the categorization and measurement of school readiness, there is great interest across the country in measuring it due to research suggesting its ability to predict future academic and social outcomes. Experts in the field have noted that cognitive and behavioral readiness skills generally predict children's ability to smoothly transition into and through elementary school (Pianta, Cox, & Snow, 2007). More specifically, children who demonstrate proficiency across an array of readiness dimensions are more likely to succeed academically in first grade than are those who are competent in only one or two dimensions (Hair, Halle, Terry-Humen, & Calkins, 2003). Stakeholders in both the early education and K-12 communities are eager to gather information about children's strengths and needs as they enter kindergarten and begin their school careers. Although there is somewhat less agreement on exactly which readiness skills matter most, and how broad and long-lasting their potential impact, there is a clear indication that *school readiness matters*. This report offers a snapshot of how ready children in Hayward are for school across a range of readiness skills.

Summer Pre-K in Hayward

As mentioned above, a second purpose of this study was to explore the relationship between summer pre-K participation in Hayward and readiness for kindergarten. Summer Pre-K (SPK) in Alameda County was launched in 2001 as a short-term educational program for children who had no prior preschool or licensed day care. The program, which takes place in the weeks leading up to kindergarten entry, introduces children to academic skills, such as counting, phonemic awareness, and the alphabet, as well

as classroom rules and expectations. It is also intended to ease children into the school setting and expose them to social experiences. Many of the program sites additionally offer meals, parent workshops, and developmental screenings for the children if a teacher or parent sees a need. The ultimate goal of the program is to increase school readiness among children without prior school experience. In prior years, the program in Hayward was conducted over five weeks, but in 2014, the program was shortened to three weeks. This report will compare the school readiness of children who attended SPK (but not preschool) to the readiness of children with no pre-K experiences and will examine the differences in readiness levels associated with a 3-week SPK model compared to readiness levels associated with a 5-week model.

California Kindergarten Common Core Skills

In addition to measuring school readiness, educators across the country are attempting to effectively evaluate children's skills in relation to the Common Core State Standards (National Governors Association, 2010). In 2010, California adopted the Common Core standards, national guidelines for critical-thinking, problem-solving, and analytical skills, that students across the state are expected to have in each grade, including kindergarten. Developed by education experts, including teachers and school administrators, the standards are research- and evidence-based and were informed by existing state standards as well as academic standards in other top-performing countries. The kindergarten standards cover a range of basic skills in reading, writing, speaking and listening, simple mathematical operations, measurement, geometry, and number sense.

In contrast to the school readiness skills described in the previous section, students are expected to demonstrate proficiency in Common Core skills by the end of the kindergarten school year to be ready for 1st grade. Assessing these skills at the beginning of kindergarten, however, helps kindergarten teachers determine the skill areas they will need to focus on during the year to ensure all their students are proficient in all standards by year-end. To meet this need, ASR developed a set of Common Core-aligned assessment items in 2014. These items were included in the Hayward assessment and students' proficiency levels on these items are detailed in this report.

Key Research Questions

The key research questions examined in this year's study and addressed in this report are the following:

1. How ready for school are the sampled kindergarten students and their families?

2. How many of these students are proficient or near proficiency across domains of readiness?

3. What family factors and child characteristics are associated with higher levels of school readiness?

4. What associations are there between SPK participation and school readiness?

5. Is there a difference in readiness levels associated with a 3-week model of SPK as compared to readiness levels associated with a 5-week model?

6. How far along are the sampled kindergarten students in their development of Common Core skills?

Methodology

This section first describes the instruments and procedures used for data collection and then discusses how the data presented in this report were prepared, analyzed, and interpreted.

Data Collection Instruments and Administration

Three instruments were used to collect data for this assessment. Kindergarten teachers completed the *Kindergarten Observation Form* and *Kindergarten Common Core Assessment,* while 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 instruments, their content, and who completed each one.

Figure 1. **Overview of Data Collection Instruments**

Instrument	What Key Data Are Assessed?	Who Completes It?
Kindergarten Observation Form (KOF)	20 school readiness skills of children in selected classrooms	Participating kindergarten teachers
Kindergarten Common Core Assessment (KCCA)	13 skills aligned with kindergarten Common Core standards	Participating kindergarten teachers
Parent Information Form (PIF)	Kindergarten transition activities; activities and routines in the home; parental supports, attitudes, and stressors; demographic and SES variables	Consenting parents of children in the assessment

Kindergarten Observation Form (KOF)

> *Kindergarten teachers assessed their students using a valid, reliable instrument: the* Kindergarten Observation Form.

The *Kindergarten Observation Form* was originally developed in 2001 using guidelines from the *National Education Goals Panel* (*NEGP*) framework of readiness. The *KOF* uses teacher observation as the method of assessment across 20 readiness skills. 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 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.

Although teacher observation is most valid and reliable, there is some risk of natural variability between teacher observers. To minimize variability, the assessment tool includes measurable indicators (items),

clear assessment instructions, a clearly defined response scale, a comprehensive scoring guide describing appropriate proficiency levels for each of the 20 readiness skills, 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. If teachers felt they could not provide an accurate assessment on items that require oral communication due to language barriers, they were instructed not to assess students on these items and instead check *Don't Know / Not Observed* or leave those items blank.

In an attempt to help teachers, principals, and school districts assess children's baseline abilities on the kindergarten Common Core skills, Applied Survey Research aligned seven *KOF* items with the standards in addition to introducing thirteen new items that assess kindergarten Common Core State Standards (see below). The seven items on the *KOF* that assessed Common Core skills covered primarily English-Language Arts standards, but also included one Math item. The items assessed students' speaking and listening skills, pre-reading skills, and counting abilities. While most Common Core-aligned items on the *KOF* fully assessed proficiency on a standard on their own, two items assessed the aligned standard only in combination with one of the thirteen additional Common Core items introduced in 2014 (i.e., *Recognizes rhyming words* and *Recognizes all letters of the alphabet*, when combined with *Produces rhyming words* and *Names all letters of the alphabet*). Appendix I outlines the *KOF* items that are aligned with the Common Core.

The *KOF* also captures students' basic demographic information to understand who took part in the study and to examine what characteristics are associated with children's skill development (e.g., experience in curriculum-based early education settings, child age, child gender, presence of special needs).

Kindergarten Common Core Assessment (KCCA)

Thirteen new items were constructed in 2014 to cover multiple Common Core skill areas in both English-Language Arts (nine items) and Math (four items). Children were rated on these items on the same four-point scale used for the *KOF* items (1=*Not Yet*, 2=*Beginning*, 3=*In Progress*, 4=*Proficient*), but because the Common Core skills reflect end-of-year standards, children were not expected to be *Proficient* on these skills at the time of assessment. The English skills assessed included engagement with group reading activities, rhyming, letter naming, sound production, use of complete sentences, and event or story narration. The math skills assessed included simple addition and subtraction, counting, quantity comparisons, sorting and ordering objects, and shape naming. Language used in the crafting of the assessment items was taken directly from the Common Core standards. See Appendix II for a table outlining the skills assessed.

Parent Information Form (PIF)

To better understand how family factors are related to children's levels of readiness, a *Parent Information Form* was first developed in 2004 for completion by parents. The *PIF* collects a wide variety of information, including: types of child care arrangements for children during the year before kindergarten entry; ways in which families and children prepared for the transition to kindergarten; engagement in family activities and daily routines; use of parenting supports and family resources; parenting support and stressors; health and health care measures; and several demographic and socioeconomic measures. Care was taken to ensure that the questions could be read at a sixth grade

reading level and the survey was offered in English and Spanish. Parents were given a children's book (in their preferred language) as an incentive for their completion of the *PIF*. 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.

Implementation

Obtaining Participation Agreement

F5AC and Hayward Unified contacted teachers and administrators to take part in the fall assessment. School and district administrators 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.

Teacher Trainings

ASR and Hayward Unified's Coordinator of Prevention and Intervention conducted teacher trainings, which were required for all teachers who volunteered to participate in the study. Each training lasted approximately 75 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; (3) *PIF*s; (4) *KOF*s and *KKCA*s and their accompanying *Scoring Guide*; (6) a sheet to track teachers' progress during the assessment; (7) an envelope for the return of study materials to F5AC. All of these materials were reviewed with teachers so that they were familiar with both the teacher-completed instruments and the parent-completed instruments.

Obtaining Parent Consent

At the beginning of the school year, teachers distributed and then monitored collection of the parent consent letters and *PIFs*. 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 send out reminder forms (provided in their training packets); if parents still did not return a consent form, teachers were instructed to assume that they declined to participate and their children were not assessed.

As an incentive to encourage participation by families, F5AC gave every child in each participating classroom a children's book. Teachers completed book order forms to specify the number of books needed in each language spoken by the children in their classrooms.

Conducting Student Assessments

Teachers were asked to conduct their student assessments (*KOF* and *KCCA*) approximately three to five weeks after the start of the school year, drawing upon their knowledge and observations of children during the first few weeks of school. The average length of time that elapsed between the start of school and teachers' observations was 23 days (a little over three weeks) after their classes had started. All completed forms were compiled by the teacher and returned to F5AC, who forwarded materials to ASR. After teacher observers had assessed all of their students and had returned study materials to F5AC, F5AC sent them a thank you letter and a stipend in appreciation of their participation.

Who Completed the Study?

Schools and Classrooms

There were 11 classrooms in six schools (Bowman, Eldridge, Harder, Fairview, Palma Ceia, and Park) that participated in the study. In all, 181 students were included in the study, a consent rate of 65 percent. About 84 percent of parents who agreed to have their child take part also completed and returned a parent survey.

Figure 2. **How Many Completed the Study?**

Data	Number/Percent
Number of children the classrooms of participating teachers	279
Number of KOFs and KCCAs returned	181
Parent consent rate	65%
Number of PIFs that were matched to a KOF/KCCA	152
Parent PIF response rate (# PIFs received/ # consents)	84%

Data Preparation

Matching of Assessment Data and F5AC Services Records

One of the key research questions in this assessment involved looking at participation in SPK and school readiness. To conduct this analysis, F5AC provided ASR with a dataset of service recipients that included children's name, date of birth, sex, and ethnicity, along with SPK participation data. Strong precautions were taken to ensure the security of the data transfer between F5AC and ASR. Once ASR received these data, matches were sought between SPK participation data and school readiness data. There were 33 students that could be matched using this method (18% of the sample). Once the matching process was completed, all child names were deleted from the F5AC data records.

An Overview of Statistical Analyses Conducted

After the data were prepared, 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 assessment items, excluding blank responses or responses of *Don't Know / Not Observed*.

- 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.

- Regressions were conducted to explore the strength of relations between assessment items and various student and family characteristics. This regression method helps determine the independent contribution of each of the factors to assessment scores.

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).

A Note about How to Interpret the Data in This Report

Teachers and parents participated in the study voluntarily. This means that the information presented in this report necessarily describes only the students and families assessed, who may differ in important ways from students and families who did not participate. In addition, the study cannot definitively conclude that any differences between SPK participants and children who did not participate in SPK are due solely to the SPK intervention. This is because participants in SPK may have also received other interventions or possess unmeasured characteristics that account for differences in readiness. Only an experimental design that randomly assigned students to SPK could determine if SPK caused any differences in readiness.

Section Summary

In the months leading up to the start of the Fall 2014 school year, Hayward Unified schools were approached to have their teachers take part in an assessment of the school readiness and Common Core skills of their students entering kindergarten. Teachers from the participating schools attended a training session in the summer or very beginning of the school year. They then secured consent from the parents of their students and distributed surveys that parents completed and returned in sealed envelopes. Shortly after obtaining parental consent, but within the first four weeks of school on average (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 20 readiness skills and 13 Common Core skills. After teachers returned assessments and parent surveys,

the data were processed and analyzed. The remaining sections of this report detail the results from these analyses.

Kindergarten Students and Families

The *Kindergarten Observation Form* and the *Parent Information Form* gathered information on several 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 assessment in terms of their demographics, socioeconomic backgrounds, and family environments.

Students

Basic Demographics

Forty-eight percent of participants in the 2014 Hayward assessment were girls and 52 percent were boys. The average age of students was 5.46 years old (just over 5 years and 5 months).

Figure 3. **Students' Sex and Age Upon Kindergarten Entry**

Demographics	Percent/Average
Boys	53%
Girls	48%
Age	5.46 yrs.

Source: Kindergarten Observation Form (2014), Parent Information Form (2014)

Note: N=179-181. Percentages may not sum to 100 due to rounding.

Hispanic/Latino students comprised the largest racial/ethnic group in the sample, representing 42 percent of students. Fourteen percent of students were Asian or Pacific Islander, 7 percent were African American/black, 6 percent were Caucasian/white, and 6 percent were Filipino. Another one-fifth of the students were of mixed racial/ethnic background.

Figure 4. **Percent of Kindergarten Students Representing Each Race/Ethnicity**
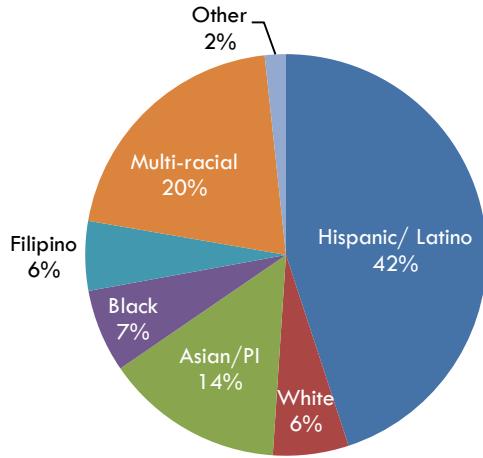
Source: Kindergarten Observation Form (2014)

Note: N=180. Percentages may not sum to 100 due to rounding.

Language Variables

There was great linguistic diversity among the kindergarten students in the sample. According to teachers, nearly half of students (49%) were English Learners. Just over six in ten students spoke English either alone or bilingually with Spanish or another language, while 28 percent spoke only Spanish. Smaller percentages were monolingual speakers of other languages, including Hindi or Punjabi, Filipino/Tagalog, Farsi or Dari, and Vietnamese.

Figure 5. **English Learner Status and Preferred Language**

Children's Preferred Language	Percent
English only	50%
Spanish only	28%
Bilingual English-Spanish	7%
Bilingual English-Other	5%
Punjabi or Hindi	5%
Filipino/Tagalog	2%
Farsi or Dari	2%
Vietnamese	1%
Other language	1%

Source: Kindergarten Observation Form (2014)

Note: N=174-181. Percentages may not sum to 100 due rounding.

Physical Health, Well-Being, and Attendance

To better understand the health and well-being of entering kindergarten students, teachers were asked to report how frequently each child indicated (s)he was hungry, appeared tired in class, was sick or ill, was absent, or was tardy. As the figure below shows, nearly all students were healthy and came to school regularly. However, about 12 percent of the students were hungry at least occasionally and about 10 percent were tardy this often.

Figure 6. **Teacher Reports of Children's Well-Being and Attendance**

■ Never ■ Rarely ■ Occasionally ■ Almost Always

	Never	Rarely	Occasionally
Was sick or ill	83%	11%	6%
Appeared tired in class	80%	12%	6%
Was tardy	79%	11%	8%
Was absent	78%	15%	6%
Indicated (s)he was hungry	75%	13%	10%
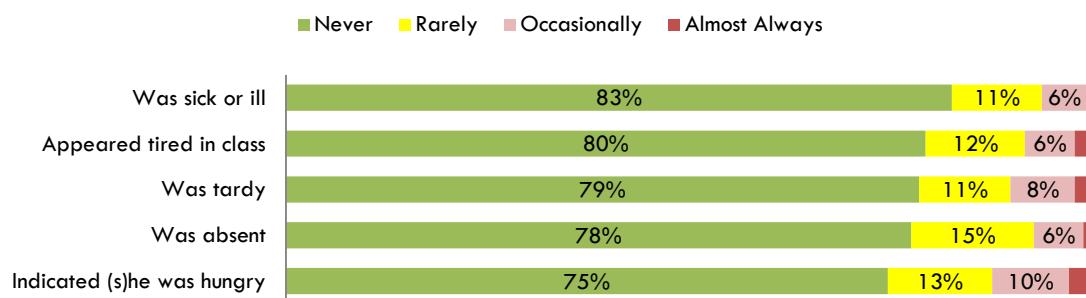
Source: Kindergarten Observation Form (2014)

Note: N=176-178. Percentages may not sum to 100 due to rounding. Proportions under 5% are not labeled.

Low Birth Weight

Previous research has shown an association between low birth weight and poor health and developmental outcomes, as well as early school difficulties and grade retention (e.g., Byrd & Weitzman, 1994). Therefore, a question about low birth weight was included on the *Parent Information Form*. Among the children in the assessment, just 5 percent had qualified as low birth weight, having weighed less than five pounds, eight ounces.

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. Nearly all students (98%) had health insurance of some form. Over half of students were covered by Medi-Cal while 8 percent were insured through another form of subsidized insurance (e.g., Covered California). Thirty-five percent of students had private insurance.

Parents were also asked if their child had received health and development screenings. Eighty percent had received a vision exam and 77 percent had received a hearing exam, but just 42 percent had received a developmental screening in the year prior to the readiness assessment. Almost all children (99%) had a regular doctor, pediatric provider, or clinic, 95 percent had a regular dentist, and 89 percent of children had been to a dentist in the last year.

Figure 7. **Children's Access to and Use of Health Care**

Insurance
- Other subsidized insurance — 8%
- Private insurance — 35%
- Medi-Cal — 56%

Screenings
- Received devleopmental screen — 42%
- Received hearing screen — 77%
- Received vision screen — 80%

Dental/ Health Care Use
- Has had a dental exam in the past year — 89%
- Has a regular dentist — 95%
- Has a regular doctor, pediatric provider, or clinic — 99%
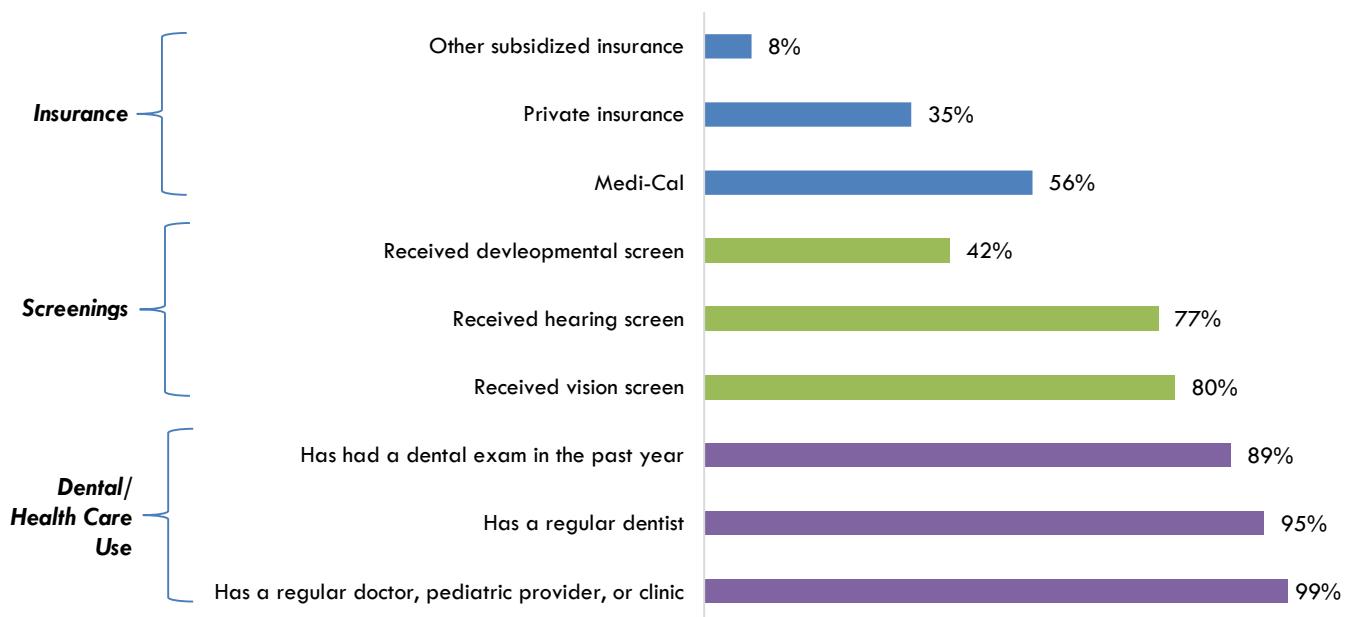
Source: Parent Information Form (2014)

Note: Insurance percentages may not sum to 100 due to rounding. N=142-150.

Special Needs

Both parents and teachers were asked about children's special needs. According to parents and/or kindergarten teachers, 7 percent of children had a diagnosed special need, while another 5 percent were suspected to have a special need by their teacher, but did not have an IEP for formal diagnosis. Speech and language challenges were the most common concerns among children with special needs, affecting 64 percent of this subgroup (7 students). All other special needs types were rare. Among children who had a diagnosed special need, 90 percent had received treatment for their disability.

Families and Households

The *Parent Information Form* was also used to capture the characteristics of students' home and family environment. This section describes families' socioeconomic background, experiences of stress, daily routines, and utilization of community resources.

Maternal Education and Family Income

Previous research has identified a school readiness gap based on family socioeconomic status that often widens over time (e.g., Crosnoe & Cooper, 2010; Ryan, Fauth, & Brooks-Gunn, 2006). Children born to less educated parents and to poorer families have significantly lower readiness levels than their peers with more educated and affluent parents. To determine whether socioeconomic status was also associated with assessment scores in Hayward, parents were asked to provide information about the child's mother's education level and the family's income. The children in the sample lived in families that

were somewhat poorer and less educated than those in Hayward as a whole[1]. Three-quarters of children in the sample came from families making under $50,000 per year and only 14 percent of mothers had a bachelor's degree or higher.

Figure 8. **Maternal Educational Attainment and Family Income**

Mother's Education	Percent
Less than High School	15%
High School Diploma	27%
Some College	31%
Associate's Degree	13%
Bachelor's Degree or Higher	14%
Family Income	**Percent**
Under $15,000	19%
$15,000-$34,999	38%
$35,000-$49,999	18%
$50,000-$74,999	14%
$75,000 or more	11%

Source: Parent Information Form (2014)

Note: N=143-144. Percentages may not sum to 100 due to rounding.

Family Mobility

Parents were asked how many addresses they had lived at since the birth of their child. Most families had lived in one or two different places, but parent responses to this question ranged from zero to nine different addresses. Three families (2%) said they had no address, a possible indicator of homelessness.

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[1] Median household income in Hayward is $62,013 and 24 percent of the population has a bachelor's degree or higher (U.S. Census, 2015).

Figure 9. **Number of Addresses Since Child's Birth**
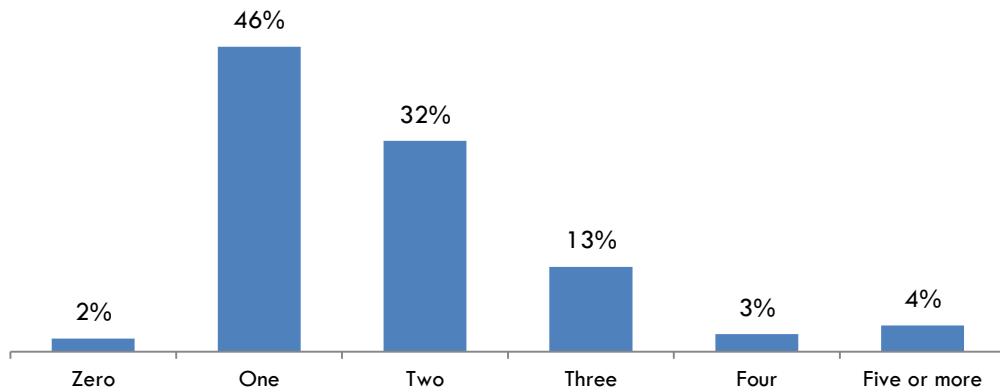
Source: Parent Information Form (2014)

Note: N=147. Percentages may not sum to 100 due to rounding.

Potential Sources of Family Stress

Parents also indicated their experiences with various types of family stressors. The most frequently cited worry among parents was financial – a majority of parents who responded reported at least some concern over money and paying the bills; just over one-fifth of the sample felt this was "a big concern" for them. In addition, over 40 percent of families reported that work issues or health/healthcare issues were at least somewhat of a concern. Fewer parents reported problems with their spouse or partner or difficulty accessing food or feeding their families.

Figure 10.   **Parent Reports of Life Concerns**
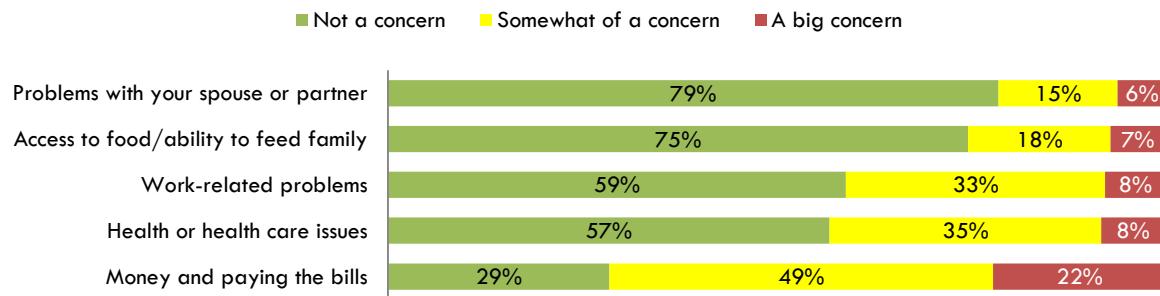
Source: Parent Information Form (2014)

Note: N=141-146. Percentages may not sum to 100 due to rounding.

Some families in the assessment also reported experience with challenging life circumstances. For example, 11 percent of children were born to a teenage mother and 23 percent of parents reported being a single parent. In addition, eleven percent of children had a parent who lost a job in the past year.

Figure 11.   **Indicators of Possible Family Risk**

Risk Factor	Percent
Single parent	23%
Parent lost job in the last year	11%
Teen mother when child was born	11%

Source: Parent Information Form (2014)

Note: N=144-148.

Parenting Support

The *Parent Information Form* also included a set of questions to assess perceptions of parenting support. The figure that follows shows that most parents had someone to help with childcare or to go to for parenting advice. However, 13 percent said they did not have someone to rely on for parenting advice, 14 percent didn't have someone to watch their child when they needed to run an errand, and 24 percent didn't have childcare when they needed to take a break.

Figure 12.   **Parents' Perceptions of Support for Parenting**

Legend: ■ Not at all true ■ Not very true ■ Somewhat true ■ Definitely true

I can easily find some to talk to when I need advice about how to raise my child	10%	21%	65%
There is someone to watch my child when I need to run an errand	11%	24%	61%
There is someone to watch my child when I need to take a break	10% 14%	22%	54%
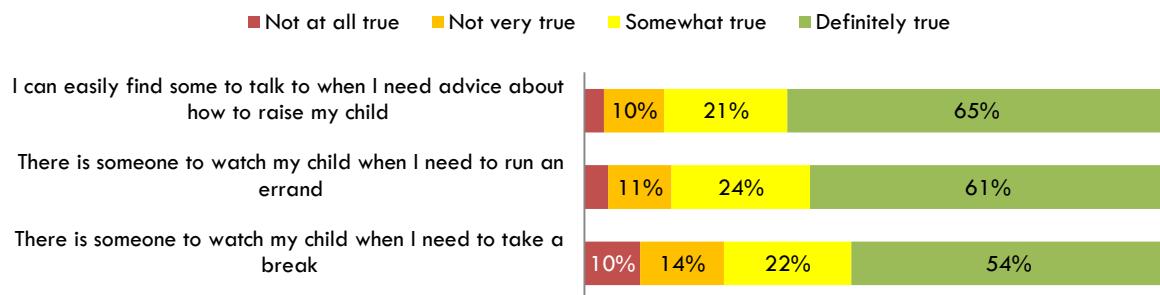
Source: Parent Information Form (2014)

Note: N=146-147. Percentages may not sum to 100 due to rounding.

Family Activities

To better understand families' routines and activities, parents reported how often they spent time doing a variety of activities with their child during a typical week, including reading, telling stories or singing songs, doing household chores, playing games or doing puzzles, doing arts or crafts, and playing sports or exercising.

The majority of families reported that they read to their children and told stories or sang songs with their child at least five times per week. Close to half of the parents who responded also involved the child in household chores this frequently. On the other hand, fewer families played sports or games or engaged in arts and crafts at least five times a week.

Figure 13.   **Frequency of Family Activities per Week**

■ Fewer than 2x ■ 2-4x ■ At least 5x

Activity	Fewer than 2x	2-4x	At least 5x
Read for more than five minutes		37%	60%
Tell stories or sing songs	5%	43%	52%
Involve child in household chores	10%	42%	48%
Play sports or exercise	9%	48%	44%
Play games or do puzzles	6%	54%	40%
Do arts or crafts	30%	42%	28%
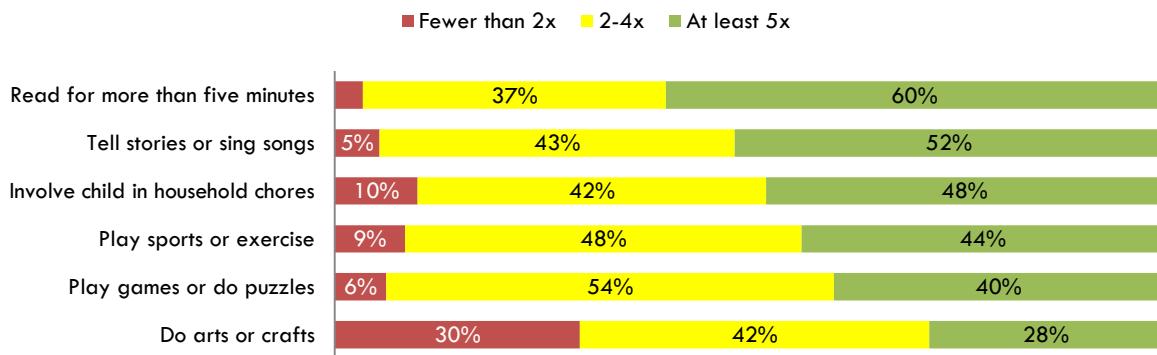
Source: Parent Information Form (2014)

Note: N=135-147. Percentages may not sum to 100 due to rounding. Proportions under 5% are not labeled.

Other Home Practices: "Screen Time", Bedtimes, and Internet Access

The American Academy of Pediatrics (AAP, n.d.) recommends that young children get no more than two hours of "screen time" per day, which includes time spent watching television or videos or playing video or computer games. However, on average, children in this assessment spent over two hours per day on "screen time" activities (mean = 124 minutes). Although the majority of children spent no more than the recommended amount in front of a screen during the school week, just 40 percent spent no more than two hours watching TV or playing video games on the weekends.

> *On average, children spent over two hours per day watching TV or playing video games, more than the amount recommended by American Academy of Pediatrics.*

About three-quarters of children went to bed by 9:00pm and 82 percent of families had access to the internet at home.

Figure 14.   **Screen Time, Bedtimes, and Internet Access**

	No more than 2 h. screen time (M-F)	No more than 2 h. screen time (Sat-Sun)	In bed by 9:00	Internet Access at Home
	60%	40%	76%	82%
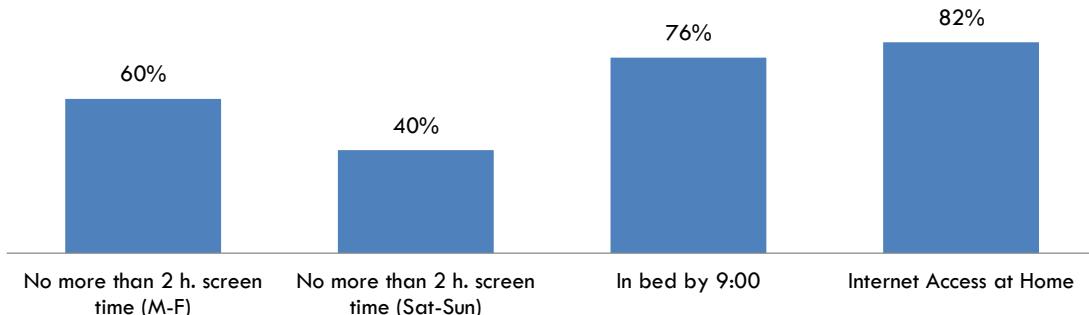
Source: Parent Information Form (2014)

Note: N=140-147.

Use of Local Family Resources

Parents also indicated whether they had ever used any of six local family resources listed on the *PIF*. The most widely used resources were local parks and libraries (utilized by 89% and 59% of families, respectively). Just over half of families visited zoos as well. Fewer families reported attending arts and music programs, going to local museums, or participating in recreational activities and camps.

Figure 15. **Local Family Resources Used**
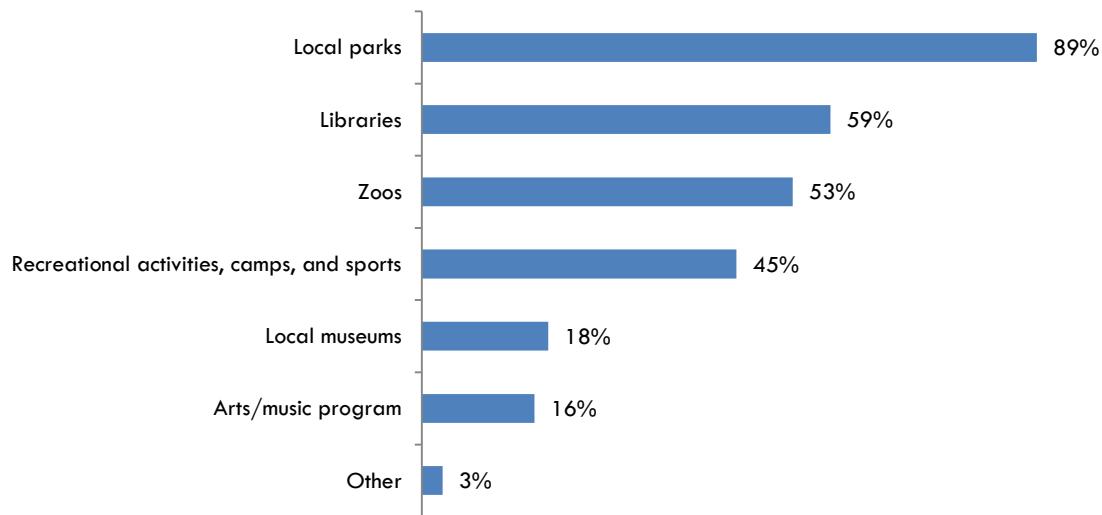
Source: Parent Information Form (2014)

Note: N=148.

Use of Parenting Programs, Services, and Supports

Parents were also surveyed about their use of a variety of parent programs and services. The most commonly used parenting resource was regular medical care while pregnant; however, while this is recommended for all pregnant women, only 64 percent of women in this sample reported having received regular check-ups. Nearly the same percentage (63%) had received assistance from WIC (Women, Infants, and Children), the federal program to support the nutritional needs of low-income families with children under 5. Many parents also reported receiving help from extended family and information about childcare and parenting.

Figure 16.   **Receipt of Parenting Programs, Services, and Supports**

Regular medical check-ups while pregnant	64%
WIC	63%
Help from extended family	39%
General info. about child development/parenting	28%
Information from your child's child care provider	24%
Parenting websites	17%
Help from neighbors and/or friends	15%
Parent education/support classes	14%
Playgroups	14%
Information/programs at your church	10%
Community clinic services	10%
Home visits from a nurse or other provider	8%
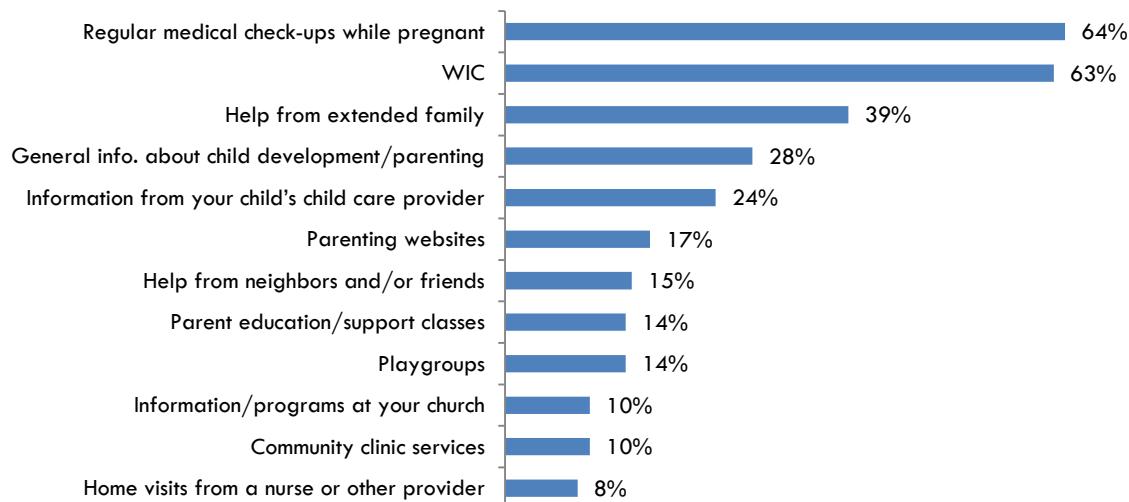
Source: Parent Information Form (2014)

Note: N=145.

Preschool and Other Early Care Experiences

Preschool has long been known to help reduce gaps in readiness between poorer children and their more affluent peers (Heckman, 2006; Zhai, Brooks-Gunn, & Waldfogel, 2011). Furthermore, it has been shown to be associated with long-term benefits for attendees, including improved educational attainment, earnings, and employment in adulthood (Heckman & Raut, 2013). Consequently, it was of great interest to know how many children in the sample went to preschool.

Types of Early Care Experiences

The majority of children had attended a licensed preschool or childcare center, including Head Start, State Preschool, or private program (67%). Eighteen percent had attended a short-term summer pre-K program (discussed in greater detail later in the report). Just 8 percent had attended Transitional Kindergarten in the prior school year, while 6 percent had been cared for in a licensed family care home.

Figure 17.   **Students' Early Care Experiences**

Any Preschool in Year Prior to K	67%
Summer Pre-K	18%
Transitional Kindergarten (in prior school year)	8%
Licensed Family Care	6%
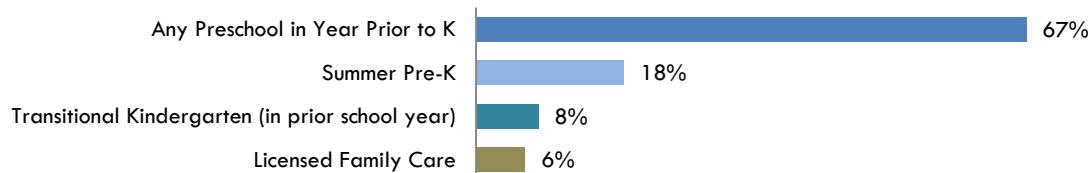
Source: Kindergarten Observation Form (2014), Parent Information Form (2014)

Note: N=150-166. Percentages sum to more than 100 because more than one source of care could be selected.

Families' Exposure to Kindergarten Information and Opportunities

The chart that follows shows that most parents received information to prepare their children for kindergarten, including information about the skills needed for kindergarten, how prepared their child was for kindergarten, and how to register their child for school.

Figure 18.   **Receipt of Information Related to Kindergarten Transition**
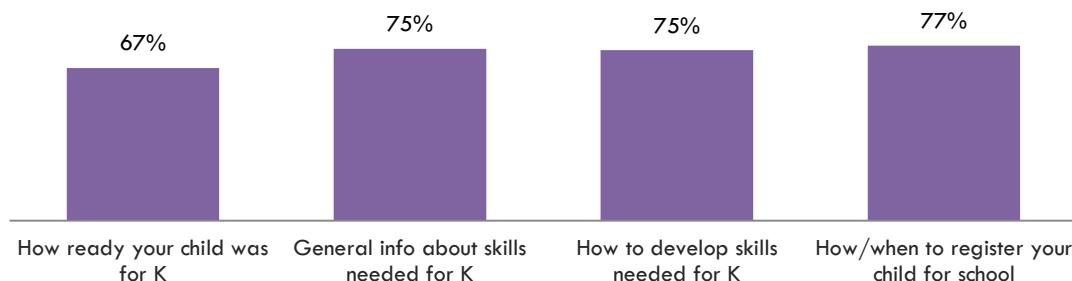
Source: Parent Information Form (2014)

Note: N=148-150.

Parents' Engagement in Transition Activities

Parents were also asked to report on kindergarten transition activities they had engaged in prior to the start of school. Nearly three-quarters of parents had visited their child's kindergarten school with the child. Additionally, about 60 percent had given the child opportunities to play with other children, and close to the same proportion had worked on school skills with the child or attended a parent meeting or orientation. Less than half of families had participated in other transition activities, such as meeting with the child's kindergarten teacher or asking their child's preschool teacher or child care provider questions about kindergarten.

Figure 19.   **Percentage of Parents Engaging in Transition Activities**
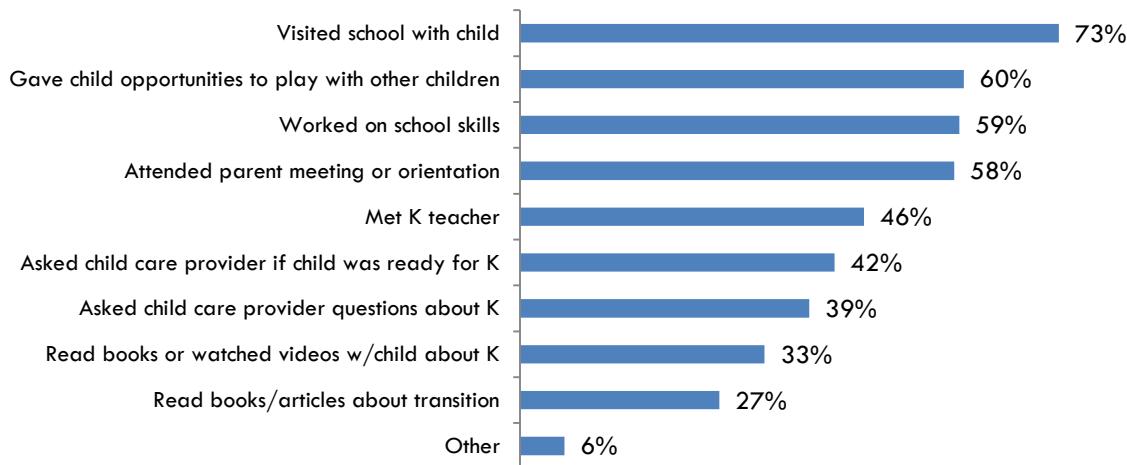
Source: Parent Information Form (2014)

Note: N=149.

Kindergarten Students and Families Section Summary

- The children assessed in the current study were **ethnically and linguistically diverse**. The largest racial/ethnic group in the sample was Hispanic/Latino (42%). Nearly half of students were English Learners.

- Most of the sample was **socioeconomically disadvantaged**. Just 14 percent of mothers had a bachelor's degree, and 57 percent of families earned less than $35,000 per year. Over 70 percent of parents reported some concerns about money and paying bills.

- In contrast to financial concerns, **development and health issues** were a problem for only a small minority of the sample. Just 7 percent of children had identified special needs at the time of kindergarten entry and only 2 percent were uninsured or lacked a regular doctor. Likewise, nearly all children came to school healthy.

- Many parents reported using **family resources and supports**. The most frequently used resources included parks and libraries, WIC, and support from extended family.

- Sixty-seven percent of children had attended a licensed **preschool** or childcare center, including Head Start, State Preschool, or a private program.

- Eighteen percent of students had enrolled in short-term **summer pre-K** program.

- Most parents received information about preparing for their child's transition to school. They were most likely to have received information about how and when to register their child for school.

- Parents engaged in a variety of activities to help their child have a smooth transition to school. Prior to the start of school, most had attended the kindergarten site with their child, provided opportunities for the child to play with other children, worked on school skills with the child, or attended a parent meeting or orientation.

School Readiness in Hayward

This section presents the following information on the readiness levels of students entering kindergarten in Fall 2014:

- Readiness levels according to four *Basic Building Blocks* of readiness
- An item-by-item summary of all 20 readiness skills measured by the *Kindergarten Observation Form*
- The child and family factors associated with readiness

Readiness Levels according to the *Basic Building Blocks*

Previous analysis of readiness data has shown that the underlying dimensions of readiness on the *KOF* are best represented by four skill groups that have been labeled the *Basic Building Blocks* of readiness. We utilize this categorization of readiness skills because it is informed by the data gathered from teachers and has been found to carry intuitive appeal to school readiness experts and practitioners.

> *The 20 readiness skills sort into four domains that can be organized according to expected skill progression.*

The sorting of the 20 readiness skills into the four *Basic Building Blocks – Motor Skills[2], Self-Regulation, Social Expression,* and *Kindergarten Academics* – are depicted in the figure on the following page. Although all of the skill dimensions are essential components of readiness, the pyramid representation in the figure below reflects a skill progression framework. That is, motor skills are at the base because they are likely to precede the more advanced self-regulation and socio-emotional skills. The top of the pyramid contains the early academic skills that are a foundation for academic content covered in kindergarten and beyond.

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[2] Note that this *Block* is composed of only two items: "Catches a ball" and "Holds pencil with proper grip".

Figure 20.   **The *Basic Building Blocks* of Readiness**

**K
Academics**
Writes own first name
Recognizes rhyming words
Counts 20 objects
Recognizes letters of alphabet
Recognizes basic colors
Recognizes primary shapes
Answers quest. about key details in lit.
Understands structure of books

Self-Regulation
Stays focused
Follows rules
Follows directions
Works/plays cooperatively
Participates succ. In large grp.
Handles frustration well

Social Expression
Expresses needs/wants verbally
Expresses empathy
Tells about a story
Demonstrates eagerness for learning

Motor Skills
Uses pencil with proper grip
Catches a ball

Students' average scores overall and on each of the four *Basic Building Blocks* dimensions were calculated (scores could range from 1.00="*Not Yet*" to 4.00="*Proficient*"). As seen in the following figure, in 2014, students' overall readiness level was 3.14, a score that is just above the "*In Progress*" level. Students' scores were highest on *Motor Skills*, while students were least proficient in their *Kindergarten Academics* skills.

Figure 21.   **Students' Proficiency across Four *Basic Building Blocks* of Readiness**
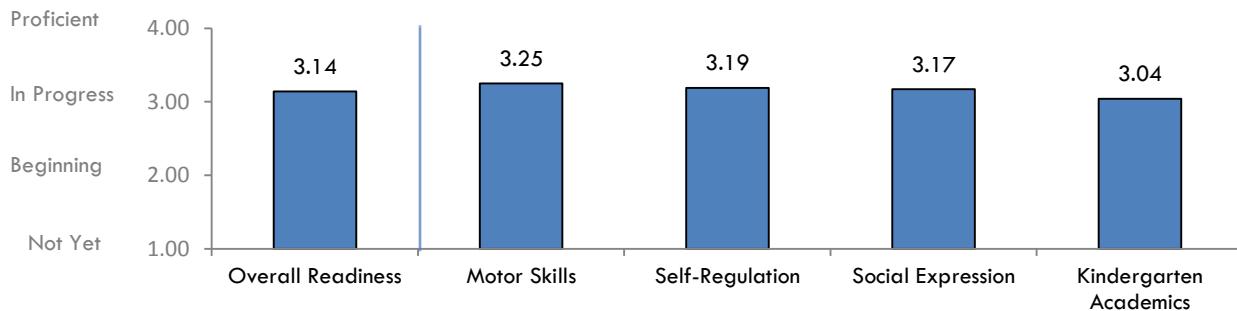
Source: Kindergarten Observation Form (2014)

Note: Means can range from 1 to 4. Scale points are as follows: 1=not yet, 2=beginning, 3=in progress, 4=proficient. N=167-180.

The figure on the next page illustrates the distribution of scores for each of the 20 items on the *KOF*. Hayward students entered Kindergarten strongest on the following specific readiness skills: recognizing basic colors and shapes (*Kindergarten Academics*) and expressing needs and wants verbally (*Social Expression*). In contrast, they were still developing their ability to recognize rhyming words and letters, and being able to tell about a story or experience (*Kindergarten Academics*). Many of the items that were difficult for children assessed skills aligned with the Common Core (see Appendix I for a list of Common Core-aligned *KOF* items). Therefore, we did not expect children to be proficient on these items at the time of assessment.

Figure 22. **Students' Proficiency Levels across 20 School Readiness Skills**

Legend: ■ Not Yet ■ Beginning ■ In Progress ■ Proficient

MOTOR SKILLS

Skill	Not Yet	Beginning	In Progress	Proficient
Uses pencil with proper grip		11%	39%	48%
Catches a ball		16%	48%	35%

SELF-REGULATION

Skill	Not Yet	Beginning	In Progress	Proficient
Stays focused	6%	19%	39%	36%
Follows rules	7%	15%	33%	45%
Follows directions		17%	33%	47%
Works/plays cooperatively		13%	33%	51%
Participates succ. in large group*	6%	15%	34%	45%
Handles frustration well	10%	13%	24%	52%

SOCIAL EXPRESSION

Skill	Not Yet	Beginning	In Progress	Proficient
Expresses needs/wants verbally		10%	28%	60%
Expresses empathy	6%	14%	39%	42%
Tells about a story*		26%	47%	24%
Demonstrates eagerness for learning		16%	45%	37%

KINDERGARTEN ACADEMICS

Skill	Not Yet	Beginning	In Progress	Proficient
Answers quest. about key details in literature*	9%	29%	39%	23%
Understands structure of books*	7%	17%	31%	45%
Writes own first name	6%	13%	23%	58%
Recognizes rhyming words*	48%	16%	15%	22%
Counts 20 objects*	11%	14%	30%	45%
Recognizes letters of the alphabet*	15%	27%	22%	36%
Recognizes basic colors		5%	11%	81%
Recognizes primary shapes	8%	9%	16%	67%

Source: Kindergarten Observation Form (2014)

Note: Proportions under 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. *Item aligned with kindergarten Common Core Standard. N=130-180.

As part of the comprehensive readiness study, an additional analysis was conducted to examine the possible child and family characteristics and experiences that contribute to children's preparedness for school. A multivariate regression was conducted, which allowed us to look at how selected variables are uniquely related to readiness levels, holding constant any other factors. For example, it allowed us to examine how preschool experience is related to readiness levels above and beyond the contribution to readiness from other factors, like family income and maternal education level.

> *Factors associated with readiness were examined using techniques that control for (hold constant) a range of child and family characteristics.*

It is important to keep in mind that the analyses conducted here can help us better understand why children vary, but these are ultimately correlational – **not causal** – analyses. 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, intelligence, and style of attachment to parents/guardians, for example, were not measured in this study, but may play an important role in children's readiness for school.

Factors Associated with Overall Readiness

Several factors emerged as significant contributors to overall readiness even after holding constant various other important child and family factors.

- The strongest predictor of readiness was **preschool attendance.** Children who attended licensed preschool in the prior year had higher readiness than children who did not, after controlling for other child and family characteristics. An additional analysis revealed preschool attendance was also strongly related to *Kindergarten Academics* skills.

- The next strongest predictor of readiness was **reading to the child**. Children who were read to at least five times per week had higher readiness than children who were read to less often or not at all. Additional analyses found that reading was particularly predictive of *Self-Regulation* skills.

- **English Learners** had marginally lower readiness scores than children proficient in English, controlling for other child and family factors. English Learners particularly struggled in the *Kindergarten Academics* domain.

The current study did not find that other factors usually related to readiness, such as gender, age, special needs, and socioeconomic status, were significantly predictive of readiness in the Hayward sample. This does not mean these factors do not play a role in readiness, but did not predict readiness in this sample when other factors were considered. The lack of significant predictors of readiness observed in Hayward may also be an artifact of the relatively small sample size, which makes it harder to detect differences in outcomes.

How Many Students Were *Ready in All Areas* for Kindergarten?

Students were considered "ready" if they scored at or above 3.25 on all Building Blocks, meaning they were *Proficient* or near proficiency on *Motor Skills, Self-Regulation, Social Expression,* and *Kindergarten Academics*. Using these criteria, **21 percent** of the children were *Ready in All Areas* for kindergarten,

while another 57 percent were *Ready in Some Areas*, having scored at least 3.25 on some but not all of the *Building Blocks*. The remaining 22 percent were *Not Ready*, having scored below 3.25 on all four *Building Blocks*.

Figure 23.   **Percent Ready for Kindergarten**
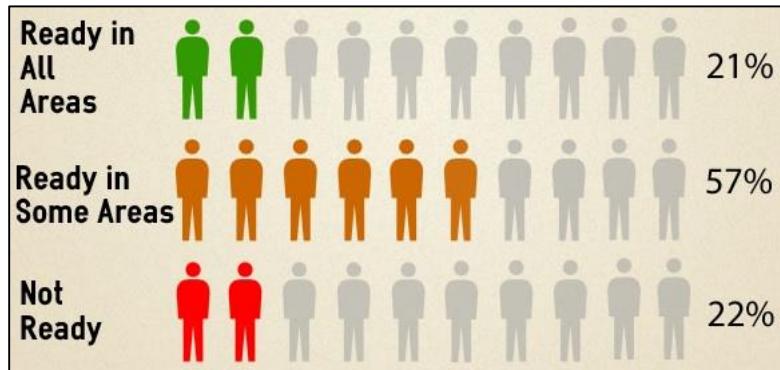
Source: Kindergarten Observation Form (2014)

Note: N=166.

Children who were *Ready in All Areas* were particularly strong in *Self-Regulation* and *Motor Skills*. Among children who were *Ready in Some Areas*, scores were lowest in *Kindergarten Academics* and highest in *Motor Skills.* Children who were *Not Ready* also scored highest in *Motor Skills*, but lowest in *Social Expression*.

Figure 24.   **Average *Building Blocks* Scores, by Readiness Level**
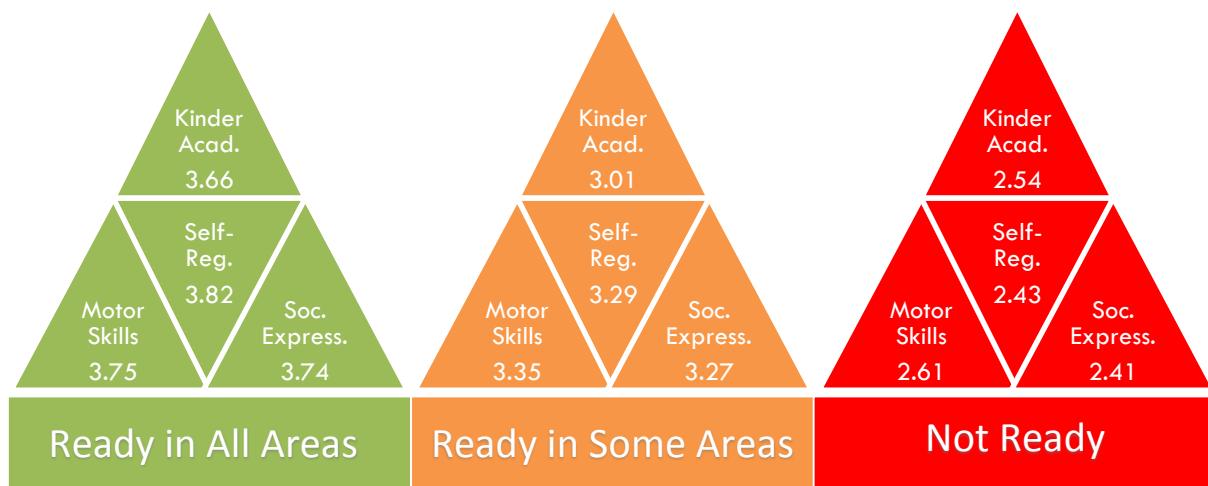
Source: Kindergarten Observation Form (2014)

Note: N=166.

Who Was *Ready in All Areas* for Kindergarten?

A regression model examining various factors related to readiness did not yield any statistically significant predictors of being *Ready in All Areas* for kindergarten. However, when looking at child and family characteristics on their own, several factors differentiated children who were *Ready in All Areas* from those who were not. Specifically, girls were more likely to be *Ready in All Areas* than boys, native English speakers were more likely to be *Ready in All Areas* than English Learners, and children who were older were more likely to be *Ready in All Areas* than younger children. Higher proportions of White and Asian children were also *Ready in All Areas* compared to black and Latino children. While a greater share of children in high socioeconomic status (SES) families were *Ready in All Areas*, differences based on SES were not statistically significant. There were also no differences based on preschool attendance.

Child/Family Characteristics	% Ready in All Areas	N
Girls*	26%	81
Boys	14%	84
Age*	5.6 yrs.	170
Hispanic/Latino*	10%	74
White	40%	10
Asian/Pacific Islander	32%	22
Black	8%	12
English Learner*	12%	76
Not English Learner	28%	90
Mother has high school or less	16%	57
Mother has more than high school	24%	79
Family earns under $35,000/year	19%	78
Family earns $35,000/year or more	25%	57
Attended licensed preschool	21%	94
Did not attend preschool	21%	47

Source: Kindergarten Observation Form (2014), Parent Information Form (2014)

Note: *Statistically significant at p<.05.

School Readiness in Hayward Section Summary

- Children's average readiness in 2014 was just above the ***In Progress*** level (3.14).

- The strongest *Building Blocks* skill set in Hayward was *Motor Skills*, while students' greatest needs were in the *Kindergarten Academics* domain.

- The strongest predictors of overall readiness in Hayward were **preschool** attendance and family **reading** activities. Children proficient in English also had marginally higher scores than English Learners in the sample.

- Just one-fifth of children were ***Ready in All Areas*** for kindergarten, having scored at least 3.25 on each *Building Block*. Children who were *Not Ready* had particularly low scores in *Social Expression*.

Special Section I: Hayward Summer Pre-K Program

In 2014, the Summer Pre-K program in Hayward operated two 12-day sessions over the course of three weeks in seven elementary schools: Bowman, Eldridge, Fairview, Harder, Palma Ceia, Park, and Southgate. As described earlier, SPK in Hayward is a short-term educational program for children who have had no prior preschool or licensed day care. The program introduces children to academic skills, classroom rules and expectations, and social experiences. Upon entry to kindergarten, a subset of children who attended one of these SPK programs was assessed in the Fall 2014 Hayward assessment. This section focuses on the 30 children in the readiness study who participated in the 2014 Hayward SPK program. On average, these children attended 10 out of the 12 days. In addition to describing the readiness of these children compared to those in the 2014 Hayward sample who did not have pre-K experience, this section compares the findings from the current assessment to those of 2013, when Hayward's SPK program ran for five weeks. This comparison will help determine whether there are any differences in the kindergarten readiness associated with participation in the 3-week SPK model as compared to readiness associated with participation in the 5-week model.

SPK Participants in the Study

The majority of the children in the sample who participated in SPK were attending Eldridge Elementary for kindergarten (13 of the 30 students). Five students with SPK experience were attending Harder, while four or fewer SPK participants were assessed at the other schools in the study.

Figure 25.   **Kindergarten Schools Attended by SPK Participants in Study**

Kindergarten School	Number of SPK Students Assessed
Eldridge	13
Harder	5
Bowman	4
Fairview	4
Palma Ceia	3
Park	1
Total	**30**

The demographics of SPK participants were generally similar to the demographics of the larger Hayward sample. The sample was ethnically/racially and linguistically diverse: 97 percent of the students were non-White and over half were English Learners. On average, children who attended SPK were 5 years, 5 months at the time of the assessment, and 7 percent had a diagnosed special need. Over one-third of their mothers had no more than a high school education and 44 percent of the children in SPK were low-income. Although the program is intended for children with no prior preschool experience, 12 of the SPK participants in the sample (46%) also had licensed preschool experience. There were no significant demographic differences between children in the sample who attended SPK and children in the sample

who did not. However, as was expected, those who attended SPK were significantly more likely to have no prior preschool experience than those who did not.

Figure 26.   **Characteristics of Hayward SPK Participants**

Child/Family Characteristics	Not SPK	SPK
Boy	54%	43%
Girl	46%	57%
Age	5.4	5.4
Hispanic/Latino	46%	37%
Caucasian/White	7%	3%
Asian	14%	17%
African American/Black	7%	7%
Multi-racial	19%	30%
English Learner	49%	53%
Not English Learner	51%	47%
Has special needs	7%	7%
No special needs	93%	93%
Mother has high school education or less	43%	36%
Mother has more than high school	57%	64%
Family earns under $35,000/year	59%	44%
Family earns $35,000/year or more	41%	56%
Attended licensed preschool*	72%	46%
Did not attend preschool	28%	54%

Source: F5AC services database, Kindergarten Observation Form (2014), Parent Information Form (2014)

Note: N=120-136 (not SPK); 25-30 (SPK). *Statistically significant at p<.05.

Is SPK Participation Associated with Parent Readiness Knowledge and Behavior?

The Hayward SPK programs include school readiness-promoting interventions that target both the child and his or her parents/caregivers. Therefore, we examined the association between child participation in SPK and whether or not parents engaged in family activities or kindergarten transition activities, or received information about readiness. In order to isolate the influence of SPK participation apart from other pre-K experiences, the analyses in this section are limited to those children in the Hayward sample with no prior licensed preschool experience. Although this comparison removed the possible confounding influence of preschool attendance, the sample size for these analyses was not large enough to detect statistically significant differences in most cases. When the analyses were repeated to include children with preschool exposure, the findings and conclusions were unchanged.

We first explored the relationship between SPK attendance and family activity engagement, including reading with the child, playing games or doing puzzles, and doing arts and crafts. Among the subsample of children who had no preschool experience, children involved in SPK generally engaged in family activities more frequently than children not enrolled in SPK.

Figure 27.   **Frequency of Family Activities per Week, by SPK Participation**
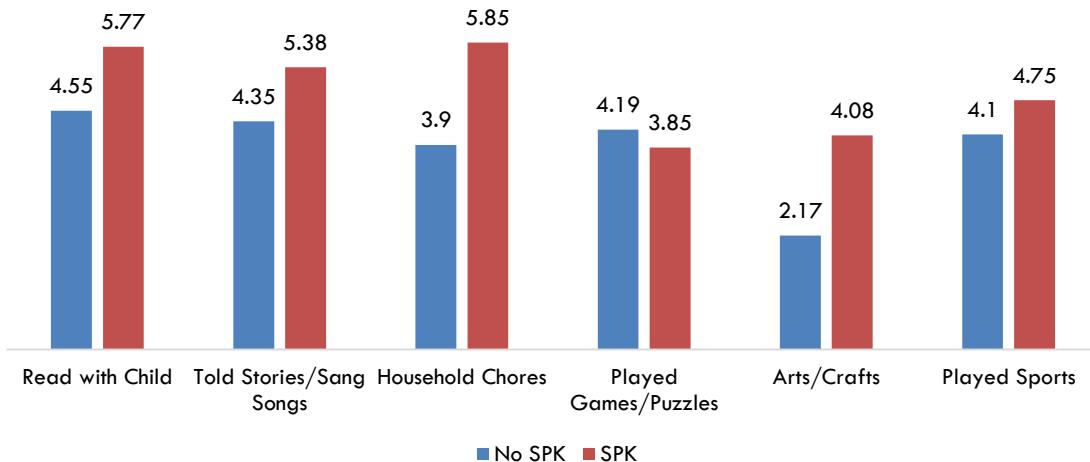
Source: Parent Information Form (2014), F5AC Records

Note: N=12-13 (SPK), 29-32 (no SPK). Only includes children with no licensed preschool or day care experience.

Comparisons were also made between the kindergarten readiness activities engaged in by parents of children involved in SPK and those whose children had no pre-K experience. The most commonly cited activities are compared below. Parents of children attending SPK were more likely to have met the child's kindergarten teacher, attended a parent meeting, and visited the kindergarten school with the child compared to parents whose children did not attend pre-K. However, only the difference in the likelihood of attending a parent meeting was statistically significant. Conversely, children who attended SPK were somewhat less likely to have worked on school skills with their parents, but this difference was not significant.

Figure 28.   **Percentage of Parents Engaging in Transition Activities, by SPK Participation**
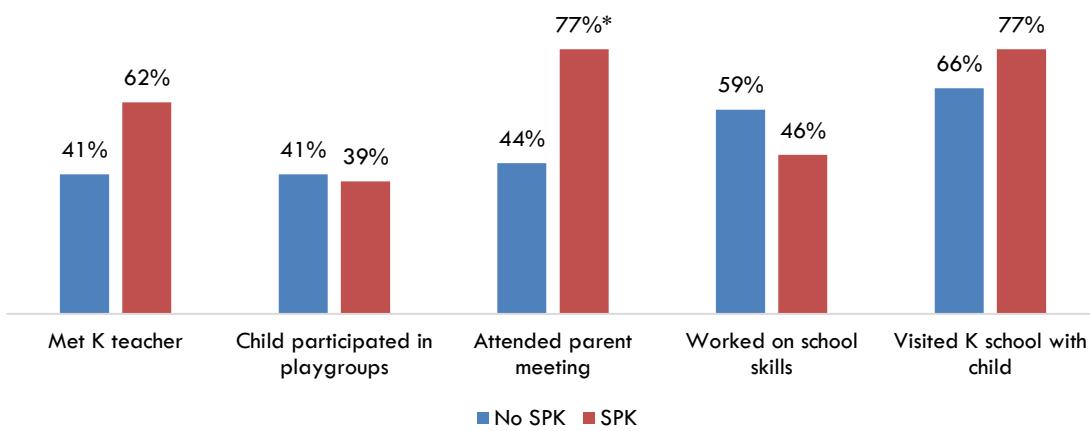
Source: Parent Information Form (2014), F5AC Records

Note: N=13 (SPK), 32 (no SPK). Only includes children with no licensed preschool or day care experience. *Statistically significant at p<.05.

Likewise, we examined the percent of parents with children in SPK who received kindergarten transition information, including information about how ready the child was for kindergarten and what skills the child would need to be ready for school. Parents of SPK participants were more likely to receive all types of information than parents of children who had no pre-K.

Figure 29.   **Receipt of Kindergarten Transition Information, by SPK Participation**
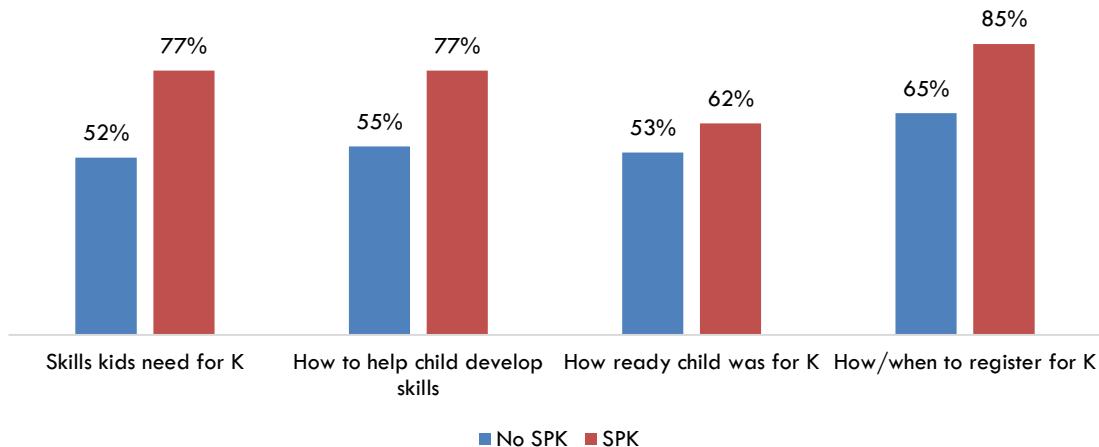
Do Children Who Attend SPK Show Enhanced Readiness Skills?

In addition to analyzing family activity and receipt of information, we compared the readiness scores of children who attended SPK to those who did not. Again, in order to isolate the association between SPK and readiness, we specifically looked at the subset of children in the sample who did not have prior licensed preschool experience[3]. As will be detailed below, there were differences in the readiness levels of those who attended SPK and those who did not, but the sample size was generally not large enough to detect statistically significant differences.

Basic Building Blocks

In general, children in SPK had somewhat lower readiness scores than children without pre-K, except in the realm of *Self-Regulation* where children with SPK experience demonstrated somewhat higher scores.

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[3] All readiness comparisons in this section and the section following it were repeated to include children who had licensed preschool experience. The results from these analyses are not shown as they did not yield different findings or conclusions.

Figure 30.   **Students' Proficiency across Four *Basic Building Blocks* of Readiness, by SPK Participation**
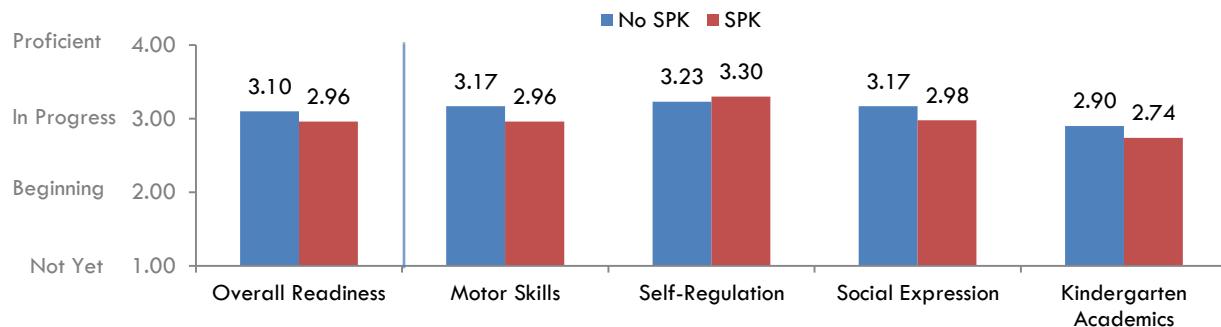
Source: Kindergarten Observation Form (2014), F5AC Records

Note: Means can range from 1 to 4. Scale points are as follows: 1=not yet, 2=beginning, 3=in progress, 4=proficient. N=43-45.

Individual KOF Items

Similar findings emerged when we compared average scores on each individual readiness skill. Children in SPK had somewhat higher scores on certain items, including those in the *Self-Regulation* block (e.g., working and playing cooperatively, participating successfully in large group activities, and handling frustrating well), but lower scores on other items (e.g., follows directions, tells about a story, answers questions about details from a story, and recognizes basic shapes) compared to children who had no pre-K experience.

Figure 31. **Average Readiness Scores, by SPK Participation**

MOTOR SKILLS

Uses pencil with proper grip
- SPK: 3.23
- No SPK: 3.25

Catches a ball
- SPK: 2.64
- No SPK: 2.95

SELF-REGULATION

Stays focused
- SPK: 3.15
- No SPK: 3.16

Follows rules
- SPK: 3.23
- No SPK: 3.19

Follows directions
- SPK: 3.00
- No SPK: 3.28

Works/plays cooperatively
- SPK: 3.38
- No SPK: 3.28

Participates succ. in large group
- SPK: 3.38
- No SPK: 3.22

Handles frustration well
- SPK: 3.64
- No SPK: 3.35

SOCIAL EXPRESSION

Expresses needs/wants verbally
- SPK: 3.33
- No SPK: 3.43

Expresses empathy
- SPK: 3.36
- No SPK: 3.19

Tells about a story
- SPK: 2.36
- No SPK: 2.89

Demonstrates eagerness for learning
- SPK: 3.00
- No SPK: 3.10

KINDERGARTEN ACADEMICS

Answers questions about key details in literature
- SPK: 2.40
- No SPK: 2.70

Understands structure of books
- SPK: 2.83
- No SPK: 2.92

Writes own first name
- SPK: 3.15
- No SPK: 3.25

Recognizes rhyming words
- SPK: 1.75
- No SPK: 1.97

Counts 20 objects
- SPK: 2.83
- No SPK: 2.81

Recognizes letters of the alphabet
- SPK: 2.42
- No SPK: 2.68

Recognizes basic colors
- SPK: 3.75
- No SPK: 3.52

Recognizes primary shapes
- SPK: 3.08
- No SPK: 3.29

■ SPK ■ No SPK

Source: Kindergarten Observation Form (2014), F5AC Records

Note: N=10-13 (SPK), 23-32 (no SPK). Only includes children with no licensed preschool or day care experience.

Percent *Ready in All Areas* for Kindergarten

Finally, we explored differences based on SPK participation in the likelihood that the child was *Ready in All Areas* for kindergarten (i.e., scored at or above 3.25 on all domains of readiness). Children who attended SPK were actually slightly less likely to be *Ready in All Areas* for kindergarten and slightly more likely to be *Not Ready* compared to children without any pre-K experience.

Figure 32. **Readiness Level of Children without Preschool, by SPK Participation**
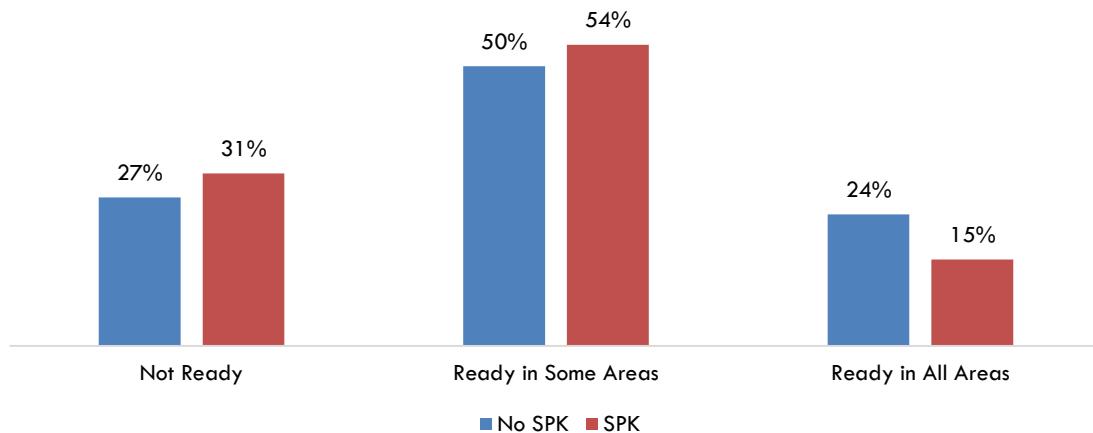

Source: Kindergarten Observation Form (2014), F5AC Records

Note: N=13 (SPK), 34 (no SPK). Only includes children with no licensed preschool or day care experience.

Is there an SPK "Dosage Effect" (i.e., Is More SPK Better)?

It is possible that we did not find significant gains in school readiness associated with SPK participation because the 3-week program was not long enough to be effective. To determine whether there was a "dosage effect" of SPK participation—that is, if attending SPK over a longer period is associated with higher readiness levels—we conducted two analyses. The first correlated SPK attendance records in the current year with readiness skills. The second analysis compared the results from the current assessment, which followed a 3-week SPK program, to the results from the 2013 assessment, which followed a 5-week SPK program.

SPK Attendance Records and Readiness

Although SPK participation did not predict higher readiness scores, we also examined whether the number of days a child attended SPK was associated with their readiness level. To do this, correlations between readiness skills and days of SPK attendance were calculated. There were three skills significantly and positively correlated with SPK attendance days:

- Answers questions about key details in literature (.387, p<.05);

- Makes predictions about text (.511, p<.01);

- Understands structure and basic features of books (.380, p<.05).

Each of these skills are components of the *Kindergarten Academics* domain. However, the number of days attended was not significantly correlated with any of the *Building Blocks* average scores.

Readiness Gains Associated with a 3-week versus 5-week SPK Program

To help gauge whether there are differences in the school preparation offered by a 3-week SPK program and a 5-week program, we compared the results from the current study (which took place following a 3-week program) to those of the 2013 study (which followed a 5-week program). There were changes in the *KOF* between these two assessment points, so the following results below only include readiness skill items that did not change over time (the *Motor Skills* block could not be included in this analysis because all items in the block changed from 2013 to 2014)[4]. In addition, the children in the 2013 sample came from across Alameda County, rather than just Hayward (which had were too few SPK participants in the sample that year for a meaningful analysis). As with all other analyses in this section, the results below reflect the scores of the subset of children each year that had no prior preschool experience.

As discussed earlier, children in the current year showed no significant differences in their readiness scores based on SPK participation. In contrast, children attending the 5-week SPK program in 2013 had significantly higher readiness scores than children who did not have any pre-K experiences that year. This may partly be because children attending SPK in 2013 had somewhat higher scores than those who attended SPK in 2014, while children without pre-K in 2013 had somewhat lower scores than those without pre-K in 2014. However, these year-to-year differences within were not statistically significant. While these findings are suggestive that a 5-week model of SPK may improve readiness to a greater extent than a 3-week model, a controlled experimental study, with a larger sample and complete SPK attendance data (days attended in 2013 were not captured in the data), is needed to fully determine the dosage effect of SPK on readiness.

Figure 33.   **SPK Participation and Readiness Levels, By Year/Program Length**
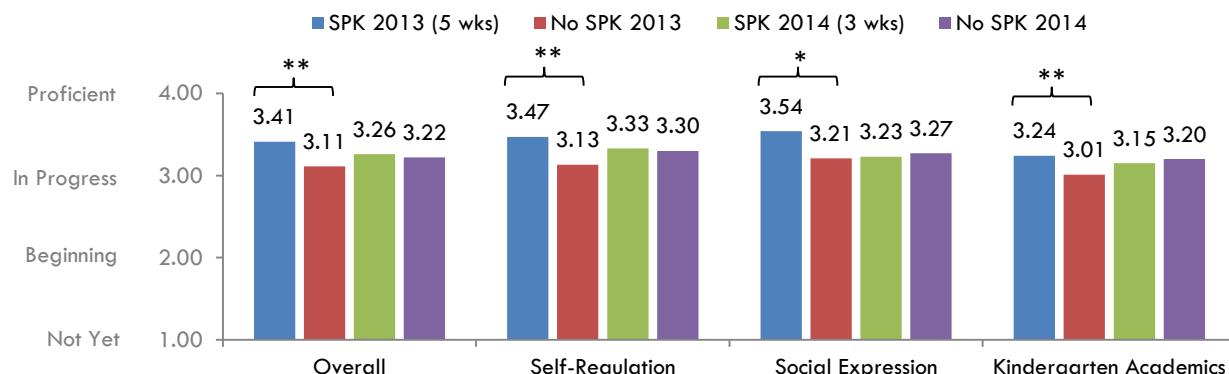
Source: Kindergarten Observation Form (2013-2014), F5AC Records

Note: Only includes items common to 2013 & 2014. Means can range from 1 to 4. Scale points are as follows: 1=not yet, 2=beginning, 3=in progress, 4=proficient. N=373-405 (2013); 43-45 (2014). *Statistically significant at p<.05; ** statistically significant at p<.01.

Hayward Summer Pre-K Program Section Summary

- Children/families involved in the SPK program were similar to the full Hayward sample in terms of demographics and socio-economic status.

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[4] The *Kindergarten Observation Form* was revised in 2014 to remove four items that were redundant with other items and/or had low correlations with established readiness constructs. Some of the items retained were re-worded based on feedback from teachers and/or to better align with the kindergarten Common Core standards. See Appendix III for an item-by-item comparison of the current *KOF* with the version used in 2013.

- Although the program was designed for children without prior preschool experience, 46 percent of the SPK participants had attended licensed preschool according to teachers and parents.

- Among the subset of children with no prior licensed preschool experience, those who attended SPK had parents with a somewhat higher level of engagement in family activities and transition activities than the parents of children who did not participate in SPK. Most differences were not significant, however, likely due to the small sample size.

- Parents of SPK participants also were more likely to receive information about school readiness than parents of children with no pre-K experience, but again these differences were not significant.

- Readiness levels of SPK participants were somewhat lower and they were somewhat less likely to be *Ready in All Areas* (proficient or near proficiency on all domains of readiness) compared to children without pre-K, but these differences were not significant.

- On the other hand, the number of days a child attended SPK was significantly and positively correlated with several *Kindergarten Academics* skills. Children who had stronger SPK attendance records had higher scores on answering questions about key details in a story, making predictions about a story, and understanding the structure and features of books.

- Children attending a 3-week SPK program showed no significant differences in their readiness scores from those without any pre-K experience, while children attending a 5-week SPK session had significantly higher readiness scores than children who did not have any pre-K experiences. While this suggests greater improvements in readiness with longer SPK sessions, a controlled experiment is needed to determine the true impact of SPK dosage on readiness.

Special Section II: Kindergarten Common Core Assessment

As mentioned in the introduction, an additional goal of the 2014 kindergarten assessment in Hayward was to explore children's abilities in specific Common Core skills. While children were not expected to be proficient on these end-of-year skills, the assessment results gauge how far children have to go over the course of the year to acquire these skills, the skills that pose a particular challenge to incoming kindergartners, and the characteristics of children who will require additional support to gain proficiency in these skills. A discussion of these findings follows below.

In addition to the seven *KOF* items that were aligned with the Common Core, there were thirteen items administered to cover Common Core skills in both English-Language Arts (ELA) and Math. Children were rated on these items on the same four-point scale used for the *KOF* items (1=*Not Yet*, 2=*Beginning*, 3=*In Progress*, 4=*Proficient*). As shown in the chart below, students were most likely to be proficient in naming primary shapes and counting forward from a number other than one. Conversely, they were least likely to be proficient in producing rhyming words and common antonyms. Fewer than half of children in the sample were proficient on all items except shape naming.

Figure 34.   **Students' Proficiency Levels across Common Core Skills**
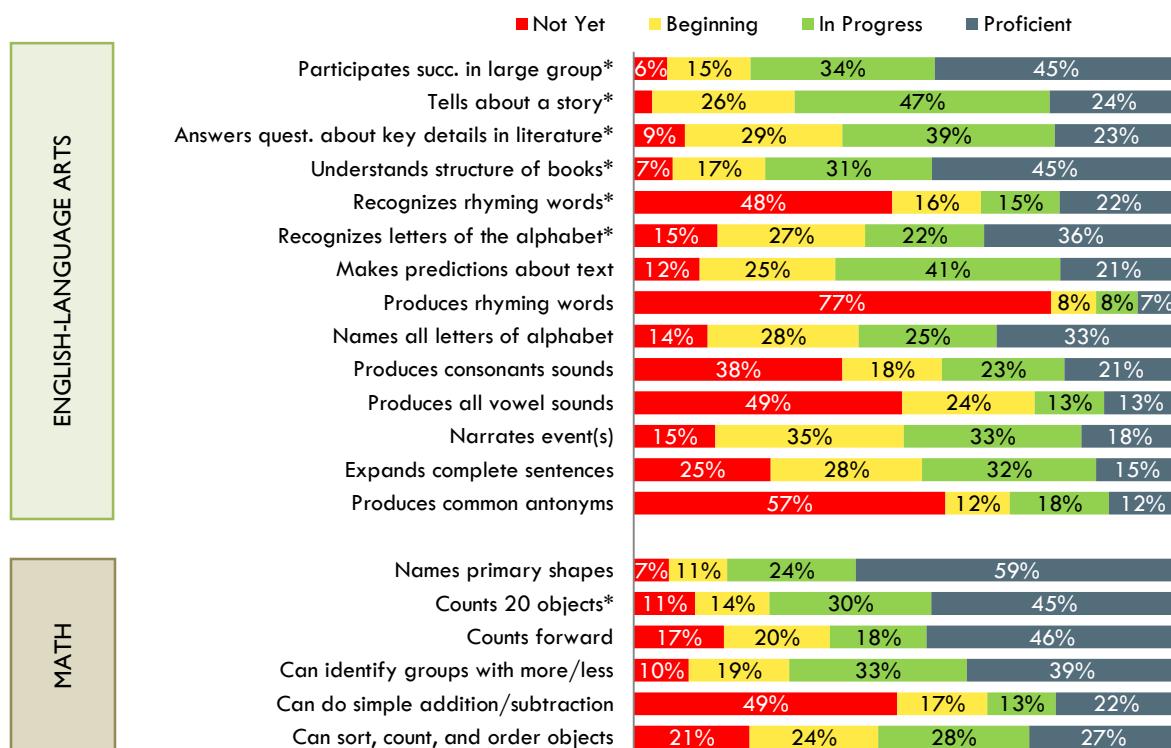
Source: Kindergarten Observation Form/Common Core Assessment (2014).

Note: Scores range from 1 (Not yet) to 4 (Proficient). Proportions under 5% are not labeled. All of the above items were language dependent item; scores were omitted for these items when language barriers were a concern. *Item appears on KOF. N=140-169.

The average scores on Common Core items tell a similar story. Children were particularly strong in several math items (naming shapes, counting, and comparing quantities in several groups of items), but demonstrated more difficulty in producing rhymes, antonyms, and vowel sounds. Across all items, children scored 2.57 out of 4.00. This score is significantly lower than the *KOF Kindergarten Academics* score (3.04), but this was expected given that the Common Core assessment measured end-of-year skills.

Figure 35.   **Students' Average Scores across Common Core Skills**

| Skill	Score
Names primary shapes	3.36
Participates succ. in large grp*	3.17
Understands structure and feature of books*	3.16
Counts 20 objects*	3.09
Can identify groups with more/less	3.00
Counts forward	2.93
Tells about a story*	2.91
Recognizes letters of the alphabet*	2.85
Names all letters of alphabet	2.78
Answers quest. about key details in literature*	2.73
Makes predictions about text	2.72
Can sort, count, and order objects	2.61
COMMON CORE AVERAGE	2.57
Narrates event(s)	2.53
Expands complete sentences	2.37
Produces consonants sounds	2.26
Can do simple addition/subtraction	2.08
Recognizes rhyming words*	1.96
Produces all vowel sounds	1.90
Produces common antonyms	1.86
Produces rhyming words	1.45

Source: Kindergarten Observation Form/Common Core Assessment (2014)

Note: Scores range from 1 (Not yet) to 4 (Proficient). *Item appears on KOF. N=140-169.

Children in the Hayward sample tended to have higher scores on the math Common Core items than the English-Language Arts Common Core items. Across domains, however, children scored between the *Beginning* and *In Progress* levels.

Figure 36.   **Students' Average Scores on ELA and Math Common Core Items**
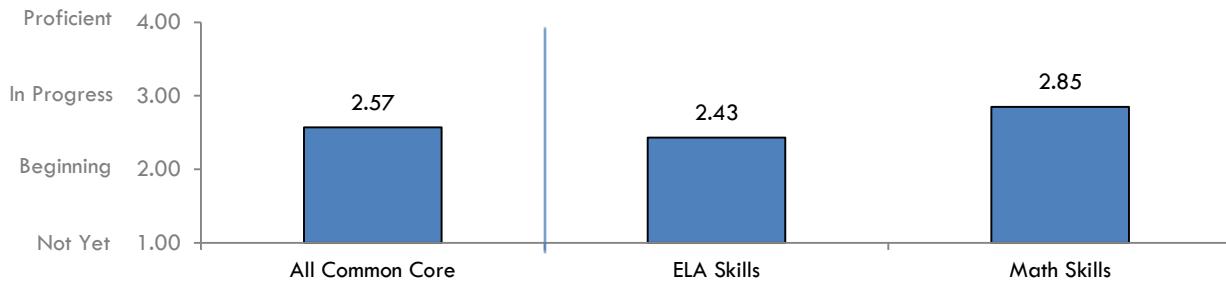

Source: Kindergarten Observation Form/Common Core Assessment (2014)

Note: Means can range from 1 to 4. Scale points are as follows: 1=not yet, 2=beginning, 3=in progress, 4=proficient. N=169.

Children with certain characteristics demonstrated higher scores on Common Core items. For example, child age was significantly correlated with Common Core skills. As shown in the chart below, children who were at least 5½ years old had significantly higher scores than their younger peers. In addition, when mothers had more than a high school education (i.e., at least some college), their children had significantly higher Common Core scores than the children of mothers with lower educational attainment. Finally, children proficient in English and those who attended licensed preschool had higher scores on Common Core items than English Learners and those who did not have preschool experience.

Figure 37.   **Average Common Core Scores, by Child/Family Characteristics**
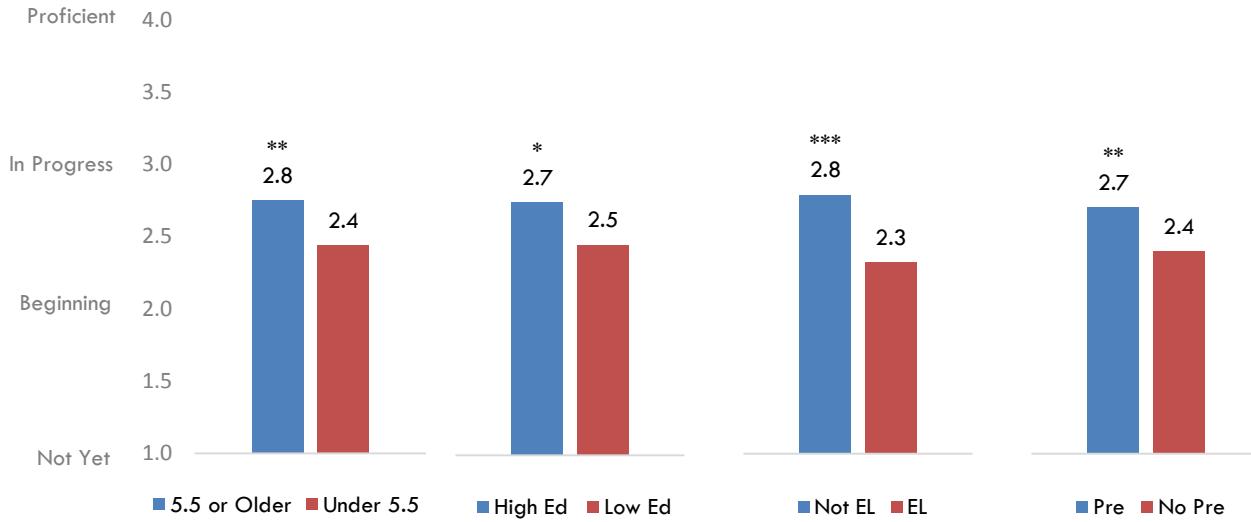
Source: Kindergarten Observation Form/Common Core Assessment (2014), Parent Information Form (2014)

Note: Scores range from 1 (Not yet) to 4 (Proficient). ***Significant at $p<.001$; **Significant at $p<.01$; *Significant at $p<.05$. N=140-169.

There were some racial/ethnic differences in Common Core skills as well. Hispanic/Latino students had significantly lower scores than children of other races/ethnicities. White students had the highest scores, but their scores were not significantly different from those of black and Asian students.

Figure 38.   **Average Common Core Scores, by Child Race/Ethnicity**
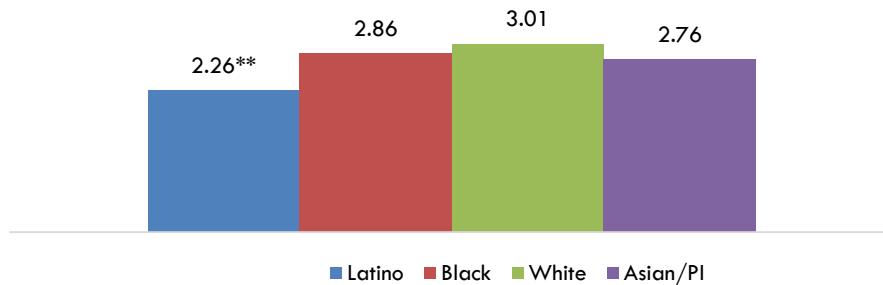
■ Latino   ■ Black   ■ White   ■ Asian/PI

Source: Kindergarten Observation Form/Common Core Assessment (2014), Parent Information Form (2014)

Note: Scores range from 1 (Not yet) to 4 (Proficient). **Scores for Latino students significantly different from children of other race/ethnicities at p<.01. N=169.

Using the median score on all Common Core items, 2.6[5], as a cut-off, we categorized children into four groups: those that had high scores on both the ELA items and math items, those that scored low on both ELA items and math items, and those that scored high in one area but not the other. As can be seen in the chart below, very few children were high on ELA, and low on math (2% of the sample), while over one-fifth of the sample was high on math and low on ELA. Children were high on both domains or low on both domains in roughly equal proportions (40% for the former, 37% for the latter).

Figure 39.   **Common Core Group Membership**

		MATH	
		Low	**High**
ELA	**Low**	37% (N=62)	21% (N=36)
	High	2% (N=3)	40% (N=67)

Source: Kindergarten Observation Form/Common Core Assessment (2014)

Note: Children were considered "high" on a domain if they scored above 2.6. N=168.

After examining a variety of child and family characteristics of members of these four groups (race/ethnicity, English Learner status, gender, and socioeconomic status), only English proficiency and child race/ethnicity emerged as significantly associated with group membership. English Learners were significantly more likely than native English speakers to score low on both ELA and math items, but they were also more likely to score high on math and low on ELA. Native English speakers were significantly more likely to be high on both domains.

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[5] Exactly half of the sample scored above this mark and half the sample scored below it.

Figure 40.   **Common Core Group Membership, by English Learner Status**
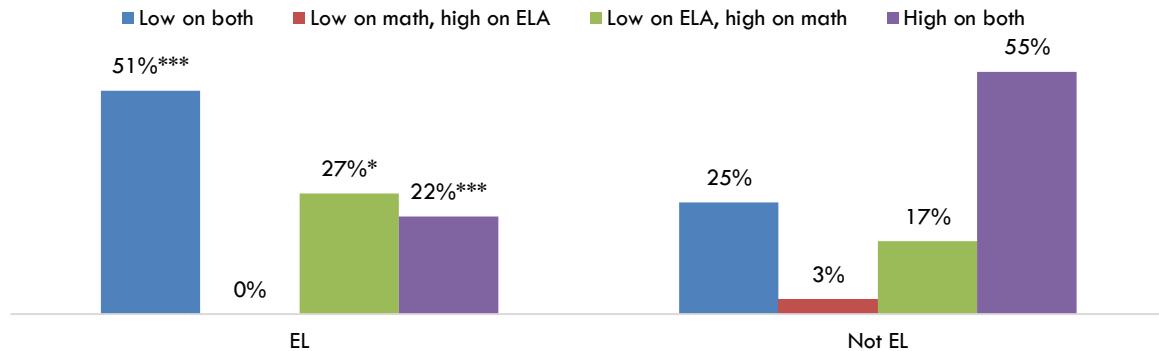

Source: Kindergarten Observation Form/Common Core Assessment (2014), Parent Information Form (2014).

Note: Scores range from 1 (Not yet) to 4 (Proficient). ***Significantly different from Not EL at p<.001; **Significant different from Not EL at p<.01; *Significant different from Not EL at p<.05. N=168.

There were significant racial/ethnic differences in group membership. The largest racial/ethnic differences were found in the group that was low on both ELA and math and the group that was high on both. Hispanic/Latino children were far more likely to be members of the group that scored low on both domains and far less likely to be a member of the group that scored high on both domains. White children were also more likely to be low on ELA and high on math than children of other races/ethnicities.

Figure 41.   **Common Core Group Membership, by Race/Ethnicity**
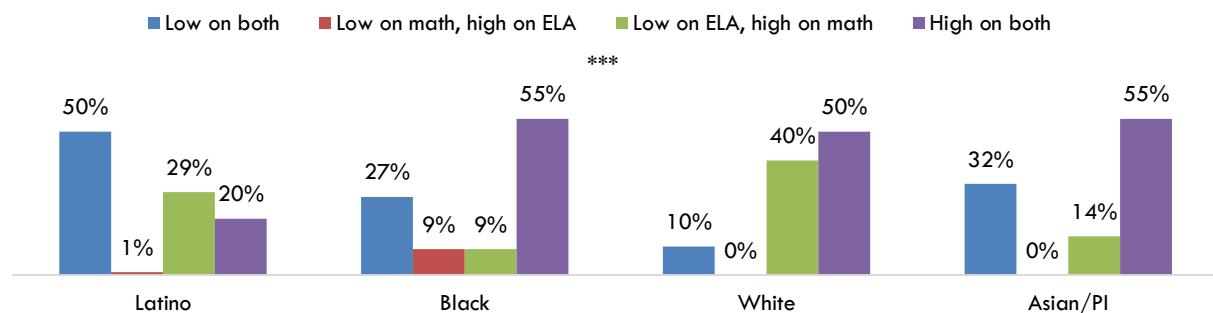
Source: Kindergarten Observation Form/Common Core Assessment (2014), Parent Information Form (2014)

Note: ***Racial/ethnic differences in membership significant at p<.001. N=167.

Kindergarten Common Core Assessment Section Summary

* Children in the Fall 2014 Hayward assessment were assessed on 20 Common Core-aligned skills, seven of which were assessed with the original *KOF*, while 13 were assessed using the Kindergarten Common Core Assessment. Six of the items assessed Common Core math skills, while the remaining 14 assessed ELA skills.

- The majority of children scored below proficiency on the Common Core items, which was to be expected for these end-of-year skills. However, they showed relative strengths in the math items (especially naming shapes and counting).

- Children who were older, were not English Learners, had mothers with more than a high school education, and had attended preschool, tended to have high scores across the Common Core items.

- Hispanic/Latino children tended to have lower scores on the Common Core items than their peers in both the math and ELA domains.

Conclusions and Discussion

In Fall 2014, a comprehensive assessment of kindergartners' school readiness and baseline proficiency on Common Core skills was conducted in Hayward Unified School District. The study also explored the link between Summer Pre-K participation and school readiness. Participants came from diverse racial/ethnic backgrounds (42% of children were Hispanic/Latino, 14% were Asian or Pacific Islander, and 20% were mixed race/ethnicity) and close to six in ten were from low-income families (57% of families earned under $35,000/year). Additionally, over one-fifth of the families was headed by a single parent. Nevertheless, children in the study had several types of experiences and backgrounds that helped prepare them for school. For example, 67 percent of children had attended preschool, 18 percent had attended a summer pre-K program, and 8 percent had attended Transitional Kindergarten in the prior year. Moreover, nearly all children were connected to regular health care and came to school healthy, and most had received health and developmental screenings. The majority of parents also engaged in school readiness activities with their children and few reported significant parenting stressors or problems, except regarding money and paying the bills.

Overall, the children in this study were *In Progress* in the development of their school readiness skills. However, their preparation varied depending on the domain of skills assessed: children were relatively strong in their *Motor Skills* and *Self-Regulation* skills, but had room for growth in their *Kindergarten Academics* skills, particularly recognizing rhymes and being able to answer questions about a story. Seventy-eight percent of children were "ready" in some or all areas of school readiness, but 22 percent had low scores across domains, suggesting they were not yet ready for kindergarten. Children with strong readiness skills were more likely to have been exposed to licensed preschool and regularly read to by a parent.

> *There is some evidence that attending a greater number of days of SPK makes a difference in the readiness levels of participants.*

Although licensed preschool experience significantly predicted school readiness, summer pre-K participation in Hayward was not strongly associated with readiness levels in 2014. Readiness scores among SPK participants did not significantly differ from the scores of children without any pre-K experience. However, there was some evidence that attending a greater number of days of SPK makes a difference in the readiness levels of participants. For example, the number of days a child attended SPK in 2014 correlated with their proficiency on several *Kindergarten Academics* skills. Moreover, we found significant gains in readiness associated with SPK in 2013, when the SPK program was two weeks longer than it was in 2014. However, to confirm that a longer SPK model better prepares students for kindergarten, a randomized controlled experiment would be needed.

In addition to the school readiness assessment, the assessment measured children's progress on a set of skills aligned with the kindergarten Common Core. As the Common Core sets end-of-year standards, children were not expected to be proficient on these skills at the time of the assessment. Nevertheless, students were proficient or near proficiency on several Common Core skills,

> *ELA Common Core skills were generally more challenging for students, particularly rhyming, producing antonyms, and producing vowel sounds.*

including naming primary shapes, counting, understanding the structure and feature of books, and participating in large group activities. In contrast, very few children were able to rhyme, produce antonyms, and produce all vowel sounds. In general, students were stronger in their math skills than

their English-Language Arts skills, suggesting ELA is an area kindergarten teachers may need to address in greater depth during the school year. The study also found that children whose mothers had no more than a high school education; Hispanic/Latino students; English Learners; younger children; and those without preschool likely will need more support throughout the year to meet the Common Core standards by the end of the school year.

The findings from the 2014 Hayward Unified School District assessment suggest that children are better prepared for kindergarten when their early experiences involve licensed preschool and school readiness support from their parents. In the absence of preschool, children may benefit from attending a short-term summer pre-K program, but only if it is long enough to fully expose children to the skills they will need to be successful in school. Not only do high quality early education experiences predict school readiness, they also are likely to help students meet the Common Core standards by year end, preparing them for a successful transition to 1st grade and beyond.

Appendix I: Common Core-Aligned KOF Items

Area	Item	Common Core Skill	Common Core Domain
ELA	Participates successfully in large group activities	Follow agreed-upon rules for discussions (e.g., listening to others and taking turns speaking about the topics and texts under discussion) (SL.K.1a)	Speaking and Listening: Comprehension and Collaboration
	Tells about a story or experience	Describe familiar people, places, things, and events and, with prompting and support, provide additional detail (SL.K.4)	Speaking and Listening: Presentation of Knowledge and Ideas
	Answers questions about key details in literature: Answers who?, what?, where? questions	With prompting and support, ask and answer questions about key details in a text (RL.K.1)	Reading, Literature: Key Ideas and Details
	Understands structure and basic features of books: Holds upright, follows text left to right, turns pages	Follow words from left to right, top to bottom, and page by page (RF.K.1a)	Reading, Foundational Skills: Print Concepts
	Recognizes rhyming words (in combination with *Produces rhyming words*): Can say whether two specific words rhyme or not	Recognizes and produces rhyming words (RF.K.2a)	Reading, Foundational Skills: Phonological
	Recognizes all letters of the alphabet (in combination with *Names all letters of the alphabet*)	Recognizes and names all upper- and lowercase letters of the alphabet (RF.K.1d)	Reading, Foundational Skills: Print Concepts
Math	Counts up to 20 objects: Correctly counts three sets containing 5, 10, and 20 objects	Count to answer "how many?" questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration (CC.K.B.5)	Counting and Cardinality: Count to tell the number of objects

Appendix II: Kindergarten Common Core Assessment Items

Area	Item	Common Core Skill	Common Core Domain
ELA	Makes predictions about text: Predicts what will happen next in a story	Actively engages in group reading activities with purpose and understanding: Makes predictions about a text (RL.K.10b)	Reading, Literature: Range of Reading and Level of Text Complexity
	Produces rhyming words: Produces a word that rhymes with a target word (in combination with KOF item "Recognizes rhyming words")	Recognizes and produces rhyming words (RF.K.2a)	Reading, Foundational Skills: Phonological
	Names all letters of the alphabet (in combination with KOF item "Recognizes all letters of the alphabet")	Recognizes and names all upper- and lowercase letters of the alphabet (RF.K.1d)	Reading, Foundational Skills: Print Concepts
	Produces consonant sounds	Demonstrates basic knowledge of one-to-one letter-sound correspondence by producing the primary sound or many of the most frequent sounds for each consonant (RF.K.3a)	Reading, Foundational Skills: Phonics and Word Recognition
	Produces all vowel sounds	Associates the long and short sounds with the common spellings (graphemes) for the five major vowels (RF.K.3b)	Reading, Foundational Skills: Phonics and Word Recognition
	Uses drawing, dictating, or writing to narrate event(s)	Use a combination of drawing, dictating, and writing to narrate a single event or several loosely linked events, tell about the events in the order in which they occurred, and provide a reaction to what happened (W.K.3)	Writing: Text Types and Purposes
	Produces and expands complete sentences: Expands on complete sentences with additional details/descriptors	Produces and expands complete sentences in shared language activities (L.K.1f)	Language: Conventions of Standard English
	Produces common antonyms: Tells the opposite of "tall", "hot", and "soft"	Demonstrate understanding of frequently occurring verbs and adjectives by relating them to their opposites (antonyms) (L.K.5b)	Language: Vocabulary Acquisition and Use
Area	Item	Common Core Skill	Common Core Domain
Math	Counts forward from a given number instead of one: Finishes three verbal counting sequences	Count forward beginning from a given number within the known sequence (instead of having to begin at 1) (CC.K.A.2)	Counting and Cardinality: Know Number Names and the Count Sequence
	Can identify which of two groups contains more/less: Says which is more/less and can make equal sets of objects)	Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group, e.g., by using matching and counting strategies (include groups with up to ten objects) (CC.K.C.6)	Counting and Cardinality: Compare Numbers
	Can do simple addition and subtraction (using objects)	Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem (OA.K.A.2)	Operations and Algebraic Thinking: Understand Addition, and Understand Subtraction

	Can sort objects into categories, count them and order them (sorts by shape, counts, orders groups from least to most)	Classify objects into given categories; count the numbers of objects in each category and sort the categories by count (MD.K.B.3)	Measurement and Data: Classify Objects and Count the Number of Objects in Each Category
	Names primary shapes	Correctly name shapes regardless of their orientations or overall size (G.K.A.2)	Geometry: Identify and Describe Shapes

Appendix III: Comparison of Items in 2013 KOF and 2014 KOF

Area	2013 KOF – 24 items	2014 KOF – 20 items Specific changes in **bold**
Fine & Gross Motor Skills	Uses small manipulatives (i.e., effectively uses pencil and scissors)	**Uses a pencil with proper grip** *(pincer or tripod grip towards tip of pencil)*
	Has general coordination on playground (e.g., kicks or catches ball, runs smoothly, hops on one foot)	**Catches a ball** *(from 5 feet away)*
	Performs basic self-help / self-care tasks (e.g., independently eats and uses toilet)	[removed]
Self-Regulation	Comforts self, using adult guidance when appropriate (e.g., Initiates strategies to soothe themselves)	[removed]
	Stays focused / pays attention during activities (e.g., stays focused in large group, completes tasks in small group)	Stays focused **during individual and small group activities** *(ex: drawing a picture)*
	Controls impulses and self-regulates (e.g., follows class rules, is not disruptive of others)	**Follows class rules and meets behavioral expectations** *(ex: is not disruptive of others)*
	Follows one to two-step directions (ex: "Please hang-up your jacket, and go sit on the rug.")	**Follows two-step directions** *(ex: "Please hang-up your jacket, and go sit on the rug.")*
	Negotiates with peers to resolve social conflicts using adult guidance when appropriate (e.g., engages in problem-solving)	[removed]
	Works and plays cooperatively with peers *(ex: takes turns and shares, helps others)*	[no change]
	Participates successfully in circle time (ex: circle time)	Participates successfully in **large group activities** *(ex: circle time)*
	Handles frustration well *(e.g., does not act out, asks for help, does not withdraw/become unresponsive)*	[no change]
Social Expression	Relates appropriately to adults other than parent/primary caregiver (e.g., converses with, seeks help from)	[removed]
	Appropriately expresses needs and wants verbally in primary language *(ex: tells teacher when needs to use toilet)*	Appropriately expresses needs and wants verbally *(ex: tells teacher when needs to use toilet)* [removed **'in primary language'**]
	Expresses empathy or caring for others *(ex: consoles or comforts a friend who is crying)*	[no change]
	Has expressive abilities (e.g., tells about a story or experience in response to a prompt)	**Tells** *about a story or experience (in response to prompt(s))*
	Expresses curiosity and eagerness for learning *(e.g., tries new activities, asks questions)*	**Demonstrates** curiosity and eagerness for learning *(ex: tries new activities, asks questions)*
	Engages in symbolic /imaginative play with self or peers	[removed]
Kindergarten Academics	[n/a]	New item: **Answers questions about key details in literature** *(answers who?, what?, where? questions)*
	Engages with books (e.g., knows how to gold a book, knows where a book starts, pretends to read, knows a book conveys information)	**Understands structure and basic features of books** *(holds upright, follows text left to right, turns pages)*
	Writes own first name *(e.g., spells and writes all letters correctly)*	Writes own first name *(writes all letters correctly and facing the right direction regardless of case)*
	Recognizes rhyming words *(can say whether two specific words rhyme or not)*	[Item is same except rhyming pattern is shorter]
	Counts 10 objects correctly ("Please give Maria 10 crayons" or "Please put 10 blocks in the basket")	Counts up to **20 objects** *(correctly counts 3 sets containing 5, 10 and 20 objects)*
	Recognizes letters of the alphabet *(note: out of sequence, may be CAPs, lowercase or combination)*	Recognizes all letters of the alphabet *(can point to a letter named when presented out of sequence)*
	Recognizes basic colors (Basic 8: red, orange, yellow, green, blue, purple, brown, and black)	[no change]
	Recognizes primary shapes *(circle, triangle, square)*	Recognizes primary shapes *(circle, triangle, square, rectangle)*

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. The firm has more than 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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