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# **First 5 LA School Readiness Initiative Parent and Child Outcomes Study**

**FINAL REPORT**

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## BACKGROUND

The purpose of the School Readiness Initiative Outcomes Study conducted by the American Institutes for Research (AIR) is to explore the extent to which School Readiness (SR) programs supported by First 5 LA<sup>1</sup> are meeting the key goal of ensuring that both children and parents are ready for children's transition to kindergarten. Although SR programs have other goals as well (e.g., increasing schools' readiness for children), the SR Outcomes Study focused exclusively on outcomes for parents and children. To assess SR grantees' progress toward the goal of preparing children and parents for school, AIR partnered with Carollee Howes and her team at the UCLA Center for Improving Child Care Quality and, in collaboration with First 5 LA, developed a mixed-methods study design. The study was conducted primarily from January through August of 2007, and incorporated parent phone surveys and focus groups, program surveys, direct child assessments, and document reviews. AIR staff also consulted periodically with the "First 5 LA School Readiness Evaluation Workgroup," comprised of grantee staff and their local evaluators, to reflect on study logistics and to assist with the interpretation of preliminary findings.

The following evaluation questions guided the study design:

1. How do program activities and services differ across grantees and for families with children of different ages (birth to 3 years and 3 to 5 years)?
2. Is participation in SR programs associated with positive outcomes for children and families?
  - a. Is participation associated with children's readiness for school?
  - b. Is participation associated with positive developmental outcomes for children birth to age 3?
  - c. Is participation associated with families' support for school readiness (including support for children birth to 3 years and 3 to 5 years)?
3. Are there differences in outcomes based on variations in program activities and services?

This report describes the methodology and findings from the School Readiness Outcomes Study and presents several recommendations for the Initiative moving forward.

## Methodology

To address the questions presented above, we conducted five key evaluation activities: 1) compiling detailed program service data through *program data capture* forms to determine the number of families served as well as the intensity and duration of those services; 2) assessing outcomes for participating parents through a *parent survey*; 3) capturing parents' experiences in the programs and their perceptions of program impact through *parent focus groups*; 4) assessing outcomes for participating children through *direct child assessments*; and 5) exploring additional evidence of grantee impacts on children and parents by conducting a *review of grantee evaluation reports*. Design and methodological issues for each of these study components are described below.

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<sup>1</sup> School Readiness programs receive funding from First 5 LA as well as state-level matching grants.

## **Program Data Capture**

Reviews of grantee semi-annual reports from 2004-05 revealed wide variation in the types of program services offered to families as well as in the intensity of these services and the duration of child and family participation. Before assessing outcomes for children and families, we first gathered basic information about the services provided to families through two “data capture forms” – brief surveys completed by program staff listing activities and services offered to parents and children. One form focused on parent activities, and the other focused on activities and services for children. Information from these forms was used both for descriptive purposes as well as to inform sampling for the parent survey and child assessment study components.

### ***Sampling***

Parent and child data capture forms were distributed to all 42 grantees who were asked to report on the services they were or would be providing to parents and children during the data collection windows for the parent survey and child assessments.

### ***Measures***

The parent and child data capture forms were developed as brief program surveys to gather basic information about program activities. On the parent data capture form, grantees were asked to list all of the parent activities occurring during the data collection window (after January 2007), specifying the type of activity (i.e., class, parent-child activity, home visit, support group, etc.), the duration of the activity, the total number of hours of service provided to parents through the activity, the total number of participants in the activity, and whether parents of children birth to age 3 were targeted for this activity. Finally, the parent data capture form asked grantees to identify an individual at their agency who would be our primary contact and serve as a study liaison to support data collection efforts.

On the child data capture form, grantees were asked to list the activities and services provided to children through their site during the data collection window (between April 15 and August 31, 2007), specifying the type of activity (preschool, child care, kindergarten transition program, home visit, parent-child activity, etc.), the number and ages of child participants, the duration of the activity, and the number of hours of services provided through the activity. In addition, we collected information about the total number of children (in two age ranges: 0-3 and 3-5) served by the program. (See Appendix A.1 and A.2 for the parent and child data capture forms.)

### ***Data collection***

Data capture forms were sent to program directors at each grantee program by email. The parent data capture form was distributed in December 2006 to prepare for the winter parent survey data collection, and the child data capture form was distributed in April 2007, in advance of the spring/summer child assessments. Programs were instructed to complete the forms electronically if possible and return them within a week or two. Reminders were sent out (by AIR and by First 5 LA) periodically to follow up with grantees who had not submitted their forms. The final response rate for each of the two data capture forms was 100 percent for the 42 SR grantee programs.

## **Parent Survey**

A key focus of the study was on assessing parent outcomes among families participating in SR programs. To assess changes in parents and parents’ perceptions of changes in their children over

time, we designed a two-wave parent survey for administration with relatively new participants in SR programs in the winter of 2007 with a follow-up in the summer, at the end of the program year.

### **Sampling**

To assess change over time in parent responses, as well as enable comparisons among groups of parents, we aimed to conduct Time 1 and Time 2 telephone surveys with 200 parents participating in SR programs. To account for attrition between Time 1 and Time 2 and anticipating response rates of about 60 percent, we targeted approximately 550 parents at Time 1, with the goal of achieving approximately 350 completed surveys at Time 1 and 200 at Time 2.

We used a stratified random sampling approach with one stratum – activity type. To specify the sampling frame, we examined data from the parent data capture forms from each of the 42 grantees. We reviewed the number and range of activities occurring during the data collection period and the anticipated number of parents enrolled in these activities. To reduce variation and enable cross-activity comparisons, we selected three eligible types of activities from which to sample parents: parent classes (such as Ready for School workshops), parent-child activities (such as Mommy and Me), and home visits. These were the activities that were most commonly reported by program directors on their data captures forms. Activities that were classified as support groups or other activities were excluded from the sampling frame. In addition, activities that were “one-time” events or that provided fewer than eight hours of service in total were also excluded. In total, 35 grantees were included as having eligible activities from which to sample parents.

Once the activities were selected for sampling, lists of parents participating in these activities were requested. Upon further investigation, we discovered that many activities were not being conducted during the data collection window and did not meet the timeline criteria for inclusion. Since we wanted to survey parents toward the beginning of their participation in SR program activities, we did not want to include activities that had been ongoing all year or that would be ending before we began conducting the survey. Some activities that were anticipated at the time of the data capture forms had been canceled for one reason or another, so a number of activities were excluded or replaced at this stage.

Overall, a total of 94 activities in thirty-five programs were included in the final sampling frame (see Table 1), representing more than 3,600 parents. It should be noted that the numbers of parents enrolled are estimations based on grantee enrollment expectations. Targeted numbers of parents were approximately proportional to the estimated number of parents enrolled in the activity. When lists of parents enrolled in the activities were requested, we found that the numbers were frequently very different from what had been anticipated by program staff. For example, 20 parents may have been expected to enroll for a parenting class, but as the class began, only 7 parents had enrolled in the class.

**Table 1. Sampling frame for parent survey.**

|                                 | Parent class | Parent-child activity | Home visit | Total |
|---------------------------------|--------------|-----------------------|------------|-------|
| <b>Eligible activities</b>      |              |                       |            |       |
| Number of activities            | 44           | 24                    | 26         | 94    |
| Number of parents               | 1223         | 1315                  | 1068       | 3606  |
| <b>Parent sample</b>            |              |                       |            |       |
| Target number of parents        | 194          | 192                   | 165        | 551   |
| Final number of parents sampled | 181          | 216                   | 173        | 570   |

Parents were randomly selected by AIR staff from participant lists from eligible activities proportional to anticipated enrollment size. Again, enrollment estimates often were not consistent with the number of names on the lists, so adjustments to the sampling approach were made repeatedly. Table 1 indicates the target numbers of parents to be sampled from each activity type as well as the actual number of parents sampled from each activity type. The total number of parents sampled was increased from 551 to 570 to ensure a sufficient number of completed surveys at Time 1 for a matched sample of 200 respondents at Time 2.

**Measures**

The Time 1 and Time 2 surveys were developed to assess the impacts of the SR program from the perspective of parent participants and drew on items used in other national studies, such as Early Head Start, to enable comparisons with non-participating parents. The survey covered a range of topics and took approximately 30 minutes to complete at each time point.

Surveys covered topics such as parenting practices and knowledge, as well as attitudes and behaviors associated with children’s development, and parent/family relationships from the parents’ perspective. For example, parent knowledge was assessed by asking parents about their understanding of child development, learning activities, school readiness skills, and responding to child cues. The quality of the home literacy environment was assessed by asking parents about the availability of children’s books in the home as well as access to and use of a library. The extent to which parents engaged their children in language and literacy activities was measured with questions about reading stories to their children and singing and early writing activities. We also explored parents’ use of routines, discipline strategies, parenting styles, and expectations. Parents’ comfort with and involvement in their child’s education were explored with a series of questions about school activity and expectations for the transition to kindergarten. The extent to which parents had a support network that they could rely on was also included as an important contextual factor.

In addition to questions about themselves, parents also answered questions about their child’s growth and development, including assessing their child’s readiness for school, and cognitive, language, and social-emotional development.

Surveys also included basic demographic questions and questions about parents’ and children’s participation in the SR program. To ensure that we would be able to contact parents for completion of a Time 2 survey and/or focus groups in the spring, the Time 1 survey also requested additional parent contact information and contact information for a relative or friend who would know how to get in touch with the family if they have moved.

Time 2 surveys also included some additional open-ended questions asking parents to identify the most important impacts that the program has had on their lives in order to assess their perceptions of change in addition to measuring changes in their reported behaviors.

The survey was translated into Spanish for use with the majority Spanish-speaking population served by the SR programs. To ensure that the language level of the survey was appropriate and also to gather grantee input on the content of the survey, we distributed the survey to grantee staff who volunteered to conduct a review and provide feedback. Feedback from First 5 LA staff was also collected at several points throughout the development process. (See Appendix A.3. and A.4 for the Time 1 and Time 2 surveys.)

### **Data collection and analysis**

As stated above, AIR staff randomly selected parents from participant lists provided by study liaisons. To facilitate all data collection with families, we worked closely with a study liaison at each grantee program who was provided with a \$200 honorarium to assist in the recruitment of parent survey participants. AIR provided training and explicit instructions to the liaisons to ensure a stratified (i.e., by activity type) random selection of families. Liaisons distributed letters to randomly sampled parents that informed them (in simple, easy to follow language) that an interviewer would be calling them to ask them questions about the SR program in which they participated. Liaisons provided further explanation if needed and encouraged the parents to participate. At this stage, parents had the option to opt out if they did not wish to be contacted.

We collected contact information for sampled parents who were invited to participate (including phone number, best time to call, and preferred language) from the liaisons, and our partners at Synovate began conducting the telephone survey in March 2007, using a computer assisted telephone interviewing (CATI) system. A small incentive (a \$15 gift card) was provided at each time point to parents who completed the survey. A total of 320 parents were surveyed at Time 1 for a response rate of 63 percent.

In June and July, parents who completed the Time 1 survey were recontacted and invited to participate in the Time 2 survey, which was administered using the same approach. At both time points, trained interviewers made 13 attempts to contact each parent by phone on different days and at different times. We also conducted follow up with liaisons to locate parents who were not reachable. A total of 205 parents were surveyed at Time 2 for a 67 percent response rate. There was an average of four months and four days between Time 1 and Time 2 interviews.<sup>2</sup>

Analysis of the parent survey data was completed in several steps:

- First, since many of the survey questions were designed to measure similar constructs, items were combined to form scales for data reduction as well as reliability purposes. Scales included in the final analysis have a Cronbach's alpha of .70 or higher, which is considered high by educational research standards. When a scale was not considered highly reliable, or when it was not feasible to create a scale, the individual question items were analyzed.

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<sup>2</sup> The median time period between Time 1 and Time 2 was three months and twenty-eight days.

- Second, sampling weights were applied to all SR parent survey data presented here. Sampling weights are adjustment factors applied to the data to take into account differences in the probability of selection and participation. These corrections allow us to draw generalizations from the sample to the population of parents participating in the three activity types selected.
- Third, paired t-tests were performed to analyze mean differences in ratings at Time 1 and Time 2. Weighted means from these paired t-tests are presented in this report.<sup>3</sup>
- Fourth, to investigate the influence of factors such as the type of activity the parent was participating in, the amount of time the parent spent in an activity, or the age of the parent's child, we examined differences in mean scores by activity type, parent-reported intensity of participation in the activity or whether their child was in the birth-to-three versus the three-to-five age range. Results from these analyses are presented where relevant.
- Finally, when possible, comparison data from national, regional, and local studies were examined to provide context for the observed results of SR parent survey responses. Comparison data presented here includes data from three studies:
  - Early Head Start (EHS) Research and Evaluation (U.S. Department of Health and Human Services, 2004) parent interviews conducted in 1996 through 2001. Parents in this study were less likely to be Latino (37% White, 35% African American, 23% Hispanic or Latino among the EHS sample), though education levels were more comparable with the SR parents (48% of EHS parents had less than a high school diploma, as compared to 56% in the SR parent survey sample).<sup>4</sup>
  - Evaluation of the First 5 LA Family Literacy Initiative (Quick, Rice, Makris, Parrish, Waugh, & González, 2005) child outcomes study parent interviews conducted in Year 2 of the intensive parent-child initiative. Parents in this study were comparable to SR parents in terms of ethnicity (98% Hispanic or Latino, 1% African American, 1% Asian) but had somewhat lower incomes (79% earned a household income of \$20,000 or less) and education levels (68% had less than a high school diploma).
  - United Way of Metropolitan Atlanta Born Learning Campaign Evaluation (Phillips, Parrish & Manship, 2006) self-administered parent surveys conducted in 2005 with parents who received information on child development and parenting in the form of direct services, such as one-on-one parenting sessions, assistance in finding answers to their parenting questions, parenting workshops, and other training and technical assistance. Pretest and posttest surveys were administered approximately four to five months apart. Parents in this study were somewhat different in terms of ethnicity (56% African American, 36% Hispanic or Latino, 3% White, 3% Asian 1% American Indian, 1% Other) and had high education levels compared to SR parents (16% of the parents in the Born Learning study had less than a high school diploma, as compared to 56% of the parents in the SR parent survey sample).

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<sup>3</sup> Significance values are based on change scores from Time 1 to Time 2 and adjusted standard errors not presented in this report.

<sup>4</sup> EHS programs are generally considered more comprehensive and intensive than many of the First 5 LA-funded SR activities.

### **Demographic characteristics of the participants**

Demographic characteristics of the families who participated in the parent survey component of the outcomes study are presented below.

- The majority of parents reported that they were Hispanic or Latino, and 79 percent spoke Spanish as their primary language.<sup>5</sup>
  - 94% Hispanic or Latino
  - 1% African American
  - 3% Asian
  - 1% Native Hawaiian or other Pacific Islander
  - 1% White
- Slightly more than half of the parents who were surveyed reported that they did not have a high school diploma.
  - 56% Less than a high school diploma
  - 21% High school graduate
  - 17% Some college
  - 6% Bachelor's degree or more
- The average age of parents participating in the survey was 32 years. Parent age ranged from 18 to 66 years old, as some grandparents participated in the survey.
  - 16% ages 18-24
  - 26% ages 25-29
  - 29% ages 30-34
  - 18% ages 35-39
  - 11% ages 40+
- One child was randomly selected from each family to serve as the focus child<sup>6</sup> for parent survey questions about children's developmental status. Age of the randomly selected child ranged from 4 months to 5 years and 11 months.
  - 2% Less than 12 months
  - 11% 12-23 months
  - 15% 24-35 months
  - 24% 35-47 months
  - 48% 48+ months
- Annual household incomes of the parents were generally low. Nearly two thirds of parents surveyed earned \$20,000 or less, while only 10 percent earned \$40,000 or more.
  - 23% Less than \$10,000
  - 40% \$10,000-\$20,000
  - 21% \$20,000-\$30,000
  - 6% \$30,000-\$40,000
  - 2% \$40,000-\$50,000
  - 8% \$50,000 or more

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<sup>5</sup> It was only possible to conduct the parent survey in Spanish and English languages; therefore the findings presented in this report are only generalizable to parents who speak these languages.

<sup>6</sup> The focus child is referred to as “[your child]” within the graphs in this report.

## **Parent Focus Groups**

In addition to collecting quantitative information from parents about their families' growth and change through their participation in SR programs, we also collected qualitative information from parents through focus groups. These discussions enabled us to capture, in their own words, parents' experiences and satisfaction, and the changes they perceived in themselves and in their children as a result of their participation in the SR programs.

### ***Sampling***

To obtain a range of perspectives, we selected five grantees to host focus group discussions with trained AIR staff. To minimize burden and to maximize the number of grantees participating in the SR Outcomes Study, we excluded grantees who participated in both of the other study components (the parent survey and the child assessments) as well as focus groups conducted by First 5 LA staff related to parent engagement. However, to ensure that participating parents were receiving a minimum level of intensity of services, we added another criterion for selection – the grantee program must have been included in the parent survey sample (since intensity was one selection criterion for that sample). From among the 35 eligible grantee sites, ten were selected at random. An additional grantee recommended by First 5 LA was selected to replace one randomly selected grantee that was busy with the SR child outcomes study at the time of focus group scheduling. All ten sites were contacted and invited to participate, and the first five grantees to have an available time slot were scheduled.

### ***Measures***

We developed a focus group protocol based on responses to the parent surveys as well as issues that were considered too difficult to explore by telephone. Topics covered on the protocol included:

- Program impacts on parents (including changes in the way they feel about their role as a parent, changes in their understanding of how children learn, changes in their interactions with their child, and in their support for their child's learning and readiness for kindergarten)
- Program impacts on children (including children's learning and other changes, and children's readiness for school)
- Parents' knowledge about, comfort with, and involvement in their child's school
- Strengths and weaknesses of the SR program and suggestions for improvement

The protocol was comprehensive to enable focus group facilitators to take the conversation in the direction most relevant for the group of parents present. However, questions were organized in terms of priority to ensure that some information was gathered on program impacts in each of the domains before the focus group session ended.

### ***Data collection and analysis***

We relied on study liaisons to recruit six to ten parents at each of the selected sites to participate in these focus groups. Spanish bilingual interviewers facilitated the focus groups when necessary. Discussions took 60 to 90 minutes, and food was provided to participating parents as a thank you. Focus groups were held with a total of 41 parents at five grantee sites in August of 2007. Data were analyzed using qualitative methods to identify common themes across groups. Highlights from these analyses are presented throughout this report.

## **Direct Child Assessments**

In addition to examining parent perspectives on the changes children birth to five have made as a result of their participation in SR programs, we also assessed children's outcomes directly. Evaluating the effects of the SR initiative on children's development is challenging for many reasons. In particular, it is difficult to determine how much of children's development can be reasonably attributed to their receipt of services. The only way to do a truly "causal" evaluation of program service impacts is to conduct a randomized controlled trial in which participants are randomly assigned to receive treatment or some form of control condition (such as a no-treatment condition and/or a different service-model condition). Randomized trial evaluation studies are often infeasible in contexts of community-based program evaluations, due to high costs of data collection and study management, and ethical concerns related to denying services to clients who might benefit from them.

In the absence of a clinical trial, we determined the best approach to correlational research design that would help to answer questions about program effectiveness. Given limited resources and time available for direct child assessments, it was decided in consultation with First 5 LA staff that we would conduct a single time point evaluation of children's developmental status toward the end of the program year (i.e., spring/summer, 2007). A detailed measurement of children's abilities and achievement in several domains was combined with information on children's receipt of services, such as types of service(s), and length of time since enrollment.

A single time point assessment allows for maximization of sample size and therefore increased power to detect program impacts, in comparison with longitudinal designs, which can have unique challenges due to the resources needed to track and assess participants multiple times, attrition problems, and longer time spans and multiple assessments needed to accurately measure growth over time. Given the relatively short timeframe for conducting this study, a longitudinal design was not feasible. Rather than estimating growth over time, a single time point assessment was used in combination with analysis of other existing data sets for comparison of children's outcomes in similar service conditions.

### **Sampling**

To ensure sufficient power for the analyses planned, we aimed to assess at least 250 (and up to 300) children participating in SR programs who were eligible for kindergarten in Fall of 2007. Without concrete information about the numbers of children enrolled, however, substantial estimations were required to determine the sampling frame. Details of these estimations plus sampling procedures are described below.

We received child activity data capture forms from 42 grantees and used this information to select activities to target for sampling for child assessments. To reduce variation and potentially enable cross-activity comparisons, we selected activities from the three activity types representing the largest number of children for our initial targets (preschool, parent-child activities, and kindergarten transition activities). Activities that were categorized as home visits, child care only, or that were offered off-site were not included as initial targets.

Activities were also excluded as initial targets if they were health-focused, for providers rather than children, one-time events, screenings, ending before May 15, or had fewer than three kindergarten-eligible children enrolled. Of the 42 grantees, 32 had at least one activity that was not excluded at this stage. In addition, to eliminate very low intensity activities, all activities offered for a total of 16

or fewer hours were excluded. This eliminated four additional grantees for a total of 28 grantees in the sampling frame with preschool, parent-child, or kindergarten transition activities occurring during the data collection period with sufficient intensity and children eligible for kindergarten in the fall of 2007.

As shown in Table 2, a total of 68 activities were determined to be eligible for inclusion. One activity was selected from each grantee as the target activity for a total of 28 target activities. To maximize the chances of capturing program impact, we selected for primary sampling purposes the higher intensity activity for each grantee if this activity was at least 1.5 times longer in duration than other activities. If intensity information was not provided, or if there was no substantial difference, we selected for primary sampling purposes the activity with the greater number of children for each grantee if this activity had at least 1.5 times the number of children. If activities were about equal in terms of intensity and size, activities were selected at random. Grantees were asked to distribute consent forms to parents of children in these activities.

If there were additional eligible activities that were occurring on approximately the same timeline (i.e., they had similar end dates) as the selected activities, these activities were selected as co-occurring activities. Grantees were invited to distribute consent forms to these activities if children could be assessed during the same time as those in the selected activities. Twelve additional activities were selected as co-occurring activities, for a total of 40 sampled activities.

To address First 5 LA’s interest in being inclusive, grantees were also invited to distribute consent forms to parents in other activities, including home visits, as long as these parents were willing to bring their children to the program for assessment on the scheduled assessment days. Since logistically it was difficult for parents receiving home visits and parents with children in activities scheduled at other times to bring their children to the site, we gave the site the option to invite them, but did not require it.

**Table 2. Sampling frame for child outcomes study.**

|   | Preschool | Parent-child activity | K transition activity | Total |
|---|-----------|-----------------------|-----------------------|-------|
| <b>Eligible activities</b>                                |           |                       |                       |       |
| Number of activities                                      | 25        | 23                    | 20                    | 68    |
| Number of children  | 1153      | 276                   | 1079                  | 2508  |
| <b>Selected activities</b>                                |           |                       |                       |       |
| Number of activities                                      | 13        | 6                     | 9                     | 28    |
| Number of children  | 869       | 105                   | 921                   | 1895  |
| <b>Co-occurring activities</b>                            |           |                       |                       |       |
| Number of activities                                      | 2         | 7                     | 3                     | 12    |
| Number of children  | 94        | 95                    | 22                    | 211   |
| <b>Total activities sampled (selected + co-occurring)</b> |           |                       |                       |       |
| Number of activities                                      | 15        | 13                    | 12                    | 40    |
| Number of children  | 963       | 200                   | 943                   | 2106  |

Consent forms were collected from parents of children in sampled activities, and children were randomly selected from among those present on the day of assessment whose parents had signed consent forms.

As noted in Table 2, there were comparable numbers of eligible activities classified as preschool, parent-child activities and kindergarten transition activities (25, 23, and 20, respectively), however, the number of children enrolled in these activities was substantially lower for parent-child activities (at least according to grantee estimates from the child activity data capture form). Although a secondary interest was to compare outcomes for children participating in each of the three types of activities, the primary question of interest was about the performance of children participating in school readiness programs more generally. As a result, oversampling of children from parent-child activities to ensure comparable group sizes was not a priority. Of greater importance was assessing sufficient numbers of children to estimate initiative-wide outcomes.

For comparison of results, a Hispanic/Latino subsample was selected from two national studies with similar populations. The two comparison samples were from the State Pre-K (Early et al., 2005) and Early Head Start studies (Love et al., 2005). The Early Head Start Pre-Kindergarten data set includes low-income children who were randomly assigned to receive Early Head Start services (or not) during their first three years of life. These children were followed into the year before they entered kindergarten, with data collected on later service receipt and developmental status. Associations between service receipt and child development can be compared for the EHS sample and the SR sample. Data from the State Pre-K study come from two studies: the National Center for Early Development and Learning (NCEDL) Multi-State Study of Pre-Kindergarten and the State-Wide Early Education Programs Study (SWEEP), which was designed as a supplement to the NCEDL study. These two studies had the same research team and employed the same measures with the same training criteria. Combined, these studies took place in eleven states selected from among states that had committed significant resources to pre-K initiatives in 2001. Pre-K data collection for the NCEDL Multi-State Study of Pre-Kindergarten took place during the 2001-02 school year in 6 states. Pre-K data collection for the SWEEP Study took place during the 2003-04 school year in five states. Comparison groups were selected from these samples and outcomes on overlapping measures were examined.

### **Measures**

A range of valid and reliable measures were used to assess children in several developmental domains. These assessments included:

- Pre-LAS 2000 (Duncan and De Avila, 1998) for children whose home language is not English, as reported by teachers: Simon Says, Art Show, Human Body sub-tests. This screener allows for determination of which language to use (English or Spanish) for the rest of the assessment.
- Peabody Picture Vocabulary Test (PPVT-III; Dunn and Dunn, 1989) and Test de Vocabulario en Imagenes Peabody (TVIP; Dunn, Padilla, Lugo, & Dunn, 1986). A non-verbal test of receptive vocabulary.
- Letter naming, number naming, color naming, and counting (FACES research team, modified from Mason & Stewart, 1989).

- Applied Problems subscale of the Woodcock-Johnson Tests of Achievement (Woodcock, McGrew & Mather, 2001) and Bateria Woodcock-Munoz-Revisada (Woodcock & Munoz-Sandoval, 1996).
- Name writing task
- Story and Print Concepts (Zill et al., 1998; modified from Mason & Stewart, 1989). Test of emergent literacy, including print and book knowledge and story comprehension.
- Assessment Behavior Scale (FACES Research Team). Upon completion of the above assessment battery, the child assessor rated each child's attitude and behavior during the assessment. Eight items covered task persistence, attention span, body movement, attention to directions, comprehension of directions, verbalization, ease of relationship, and confidence. The assessor also completed a seven-item checklist of special conditions that might apply: nonverbal responses, nonstandard English, English as a second language, limited English proficiency, child has difficulty hearing or seeing, and child's speech is difficult to understand.

### **Data collection and analysis**

Children whose parents had signed consent forms and were present on the assessment day were assessed in one-on-one sessions with a trained assessor that took approximately 20-40 minutes. In total, 240 children were assessed. To analyze the data, we examined mean scores on each of the assessments used, including standardized scores for the two normed assessments (the PPVT-III/TVIP and the Woodcock-Johnson/Woodcock-Muñoz). As with the parent survey analyses, we also compared groups of children to assess differential impacts of program participation. Specifically, we compared the performance of children from different activity types, and we calculated correlations between assessment scores and length of participation in the program. In addition, we drew comparisons between SR children and a Hispanic/Latino subsample from the State Pre-K (Early et al., 2005) and Early Head Start (Love et al., 2005) studies.<sup>7</sup> Significant differences between these Hispanic/Latino subsamples and the Hispanic/Latino subsample from the SR direct child assessments are noted in the text.

### **Demographic characteristics of the participants**

Demographic characteristics of the children who participated in the direct child assessments are described below.

- The average age of children participating in direct child assessments was 60 months. Children's ages ranged from 46-75 months. Half of the children were under 60 months old and half were 60 months old or older.
- 95 percent of children were identified as Hispanic or Latino and 50 percent were assessed in English, as determined by the Pre-LAS (the screener used to determine the language of assessment).
- On average, assessed children were in the program for 13 months.

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<sup>7</sup> To ensure that comparisons were made among more demographically similar samples, only the Hispanic/Latino participants from each study were included in these analyses.

- Parent reports revealed that 8 percent of children had been identified as having special needs or had an IEP (Individualized Education Program) or IFSP (Individualized Family Service Plan).
- Forty-two percent of the parents of the assessed children reported that they did not have a high school diploma.
  - 42% Less than a high school diploma
  - 24% High school graduate
  - 24% Some college
  - 10% Bachelor's degree or more
- Half of the parents reported that they were currently employed, working 34 hours per week, on average.
- Annual household incomes of the parents of the assessed children were similar to those of parents who participated in the parent survey. Just over half of the parents earned \$20,000 or less, while 18 percent earned \$40,000 or more.
  - 21% Less than \$10,000
  - 32% \$10,000-\$20,000
  - 16% \$20,000-\$30,000
  - 13% \$30,000-\$40,000
  - 7% \$40,000-\$50,000
  - 11% \$50,000 or more

## **Grantee Report Reviews**

In addition to the new data collected from participants in grantee programs, as described above, AIR also conducted an analysis of extant data – namely grantees' summaries of their own evaluation findings in their 2005-06 year-end reports. In order to maximize the utility of the information collected by grantees through their own program-level evaluation efforts, AIR conducted a thorough review of grantees' evaluation findings related to parent and child outcomes and highlighted common themes. These findings are presented in this report where relevant. (See Appendix B for the complete review of grantee evaluation reports and a description of the review methodology.)

## **PARENT OUTCOMES**

As mentioned above, parent outcomes were obtained primarily through analysis of change scores from parent responses to the parent phone survey at Time 1 and Time 2. Results from these analyses are presented below. Because some questions were only appropriate for parents with children in a particular age range, the age of the focus child was used to guide the interviewer to ask or skip these questions. In each of the figures below, the age range of the focus child is noted in parentheses. In addition, significant differences (either between Time 1 and Time 2 or between SR parents and comparison parents) are noted with asterisks in the labels under the bars or in the legend. Results from parent focus groups and grantee report reviews are also incorporated where relevant.

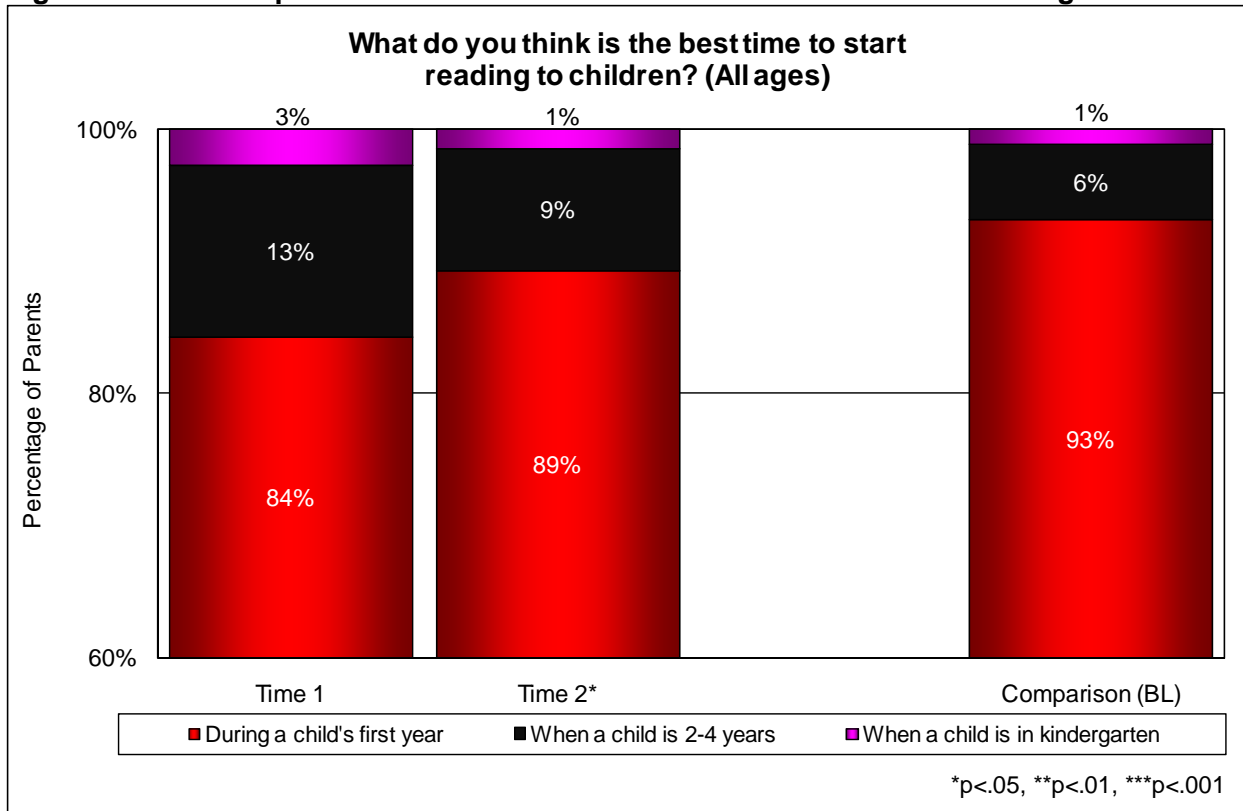
### **Parent Knowledge**

Changes in parents' knowledge and understanding of child development from Time 1 to Time 2 was assessed by asking parents about basic parenting information related to preparing their children to be

ready for school. We found that even in this relatively short period of time, parents demonstrated modest increases in knowledge across several areas. Although small, changes noted are statistically significant. For example:

- On average, parents reported that they believed it was important to begin reading to children at an earlier age at Time 2 compared to Time 1. SR parents' views on when to begin reading to children at Time 2 were not significantly different from parents responding to the Atlanta Born Learning Campaign survey at Time 2. (See Appendix C.1 for full comparison data results.)

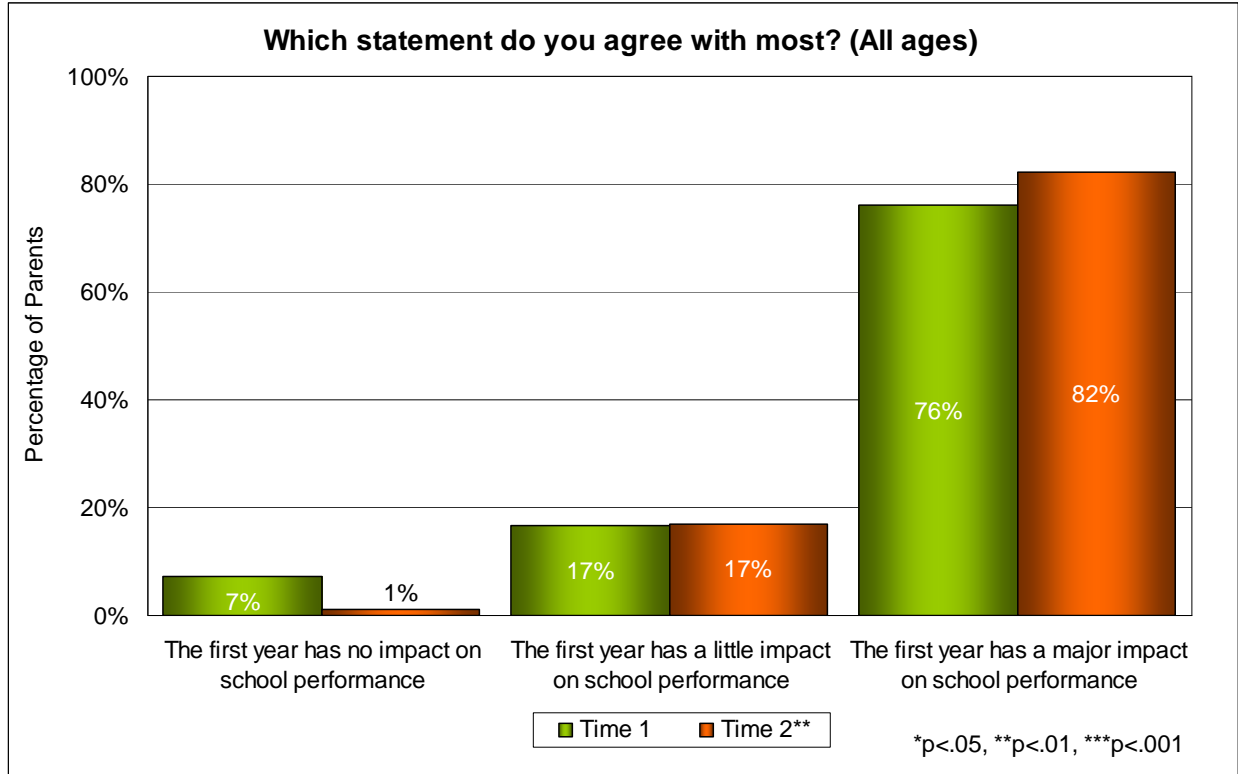
**Figure 1: Parent Report on their Beliefs about the Best Time to Start Reading to Children**



Source: SR Parent Survey and Atlanta Born Learning Campaign Evaluation  
 Note: May not sum to 100 due to rounding.

- Significantly more parents at Time 2 than at Time 1 reported that they believed a child’s experiences in the first year of life has a major impact on school performance.

**Figure 2: Parent Report on their Beliefs about the Impact of the First Year of Life on School Performance**



Source: SR Parent Survey

- Parents also showed improvement in their understanding of the importance of monitoring their child’s development. On average, parents at Time 2 reported that one should begin discussing his or her child’s development with a health professional at an earlier age compared to the parent reports at Time 1.

We did not find significant growth in parents’ knowledge in the following areas, though parent responses at Time 1 were already close to the high end of the scale, making it more difficult to demonstrate growth at Time 2 (i.e., ceiling effects noted for these items):

- The benefits of involving children in everyday learning activities
- The importance of responding to children’s cues for showing children they care
- The importance of play for children at different ages<sup>8</sup>

Parents in focus groups described improvements in their knowledge about child development in a number of areas. Twelve parents across the five programs visited said the program had taught them more about what to expect from their children at different ages and about how children learn. Parents

<sup>8</sup> Parents who reported having had more SR program participation at Time 1 rated the importance of play significantly higher at Time 1 than parents who reported receiving less service at Time 1.

reported learning that children start learning from a very young age, so stimulation in the early months is important. For example, one parent said:

*I have learned that from a very young age a child is learning, and before we didn't pay much attention like we do now... before I would say to myself, "Oh he is still young," but one doesn't realize their capacity from when they are in the womb.*

Another parent reflected on the importance of understanding the stage of child development in order to support their child's learning:

*When I understand their age and their development, then I will be able to guide them the right way and not give them hard things to do when actually [they're at a different] developmental level. It is good for me to know what to give them to do, what they can do, this kind of stuff. [The program was] giving us this knowledge. They talk about lots of issues in Mommy and Me.*

Although we did not see statistically significant growth in this area on the parent survey, focus group parents (five parents across three different programs) reported learning about the importance of playing with their children. Some parents mentioned that they have learned how to play with their children as a mechanism for teaching them. For example:

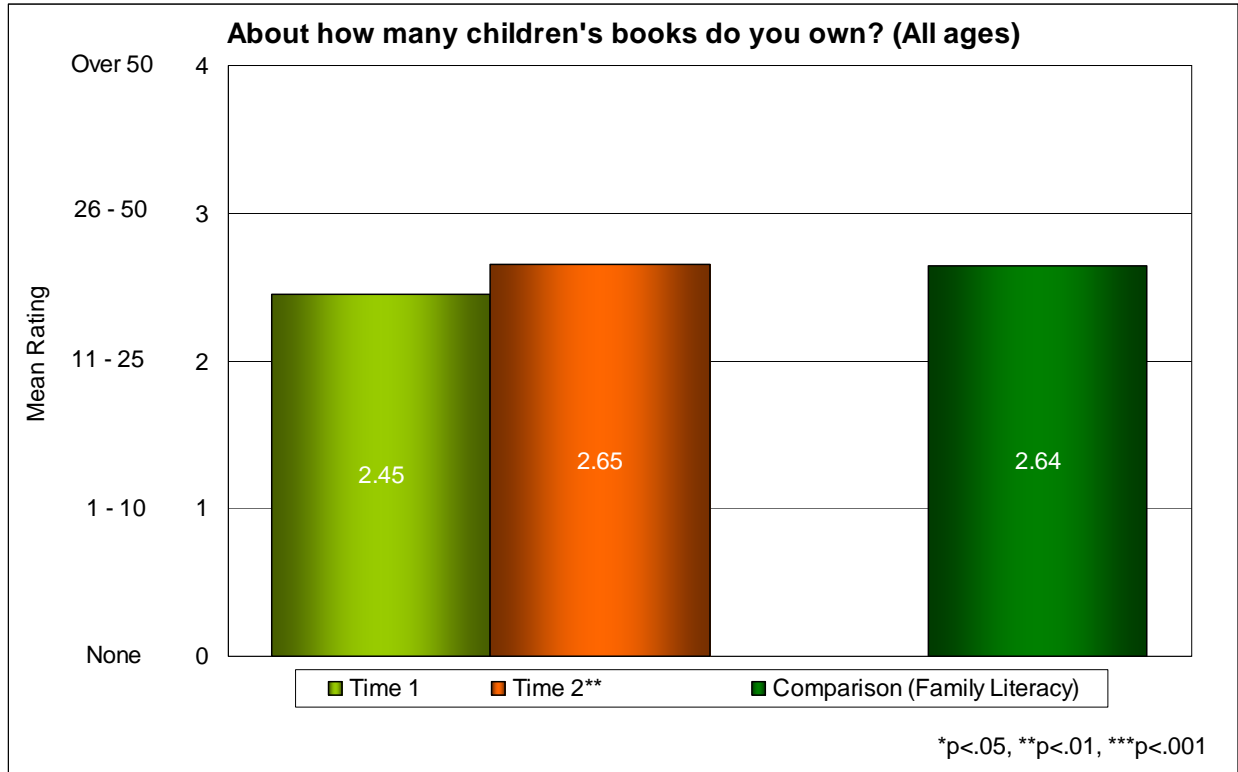
*I've learned to play with them. And by their playing I know that they are learning, and it's fun. Learning doesn't have to be tough or serious stuff, especially at their age. It has to be lots of fun. And even though I'm much older than my kids, I have to have fun with them too.*

### **Supportive Environments for Learning – Home Literacy Resources**

Next, we explored resources available in the home to support children's learning, particularly with regard to language and literacy development. We found small, but statistically significant, growth on each of the measures used to assess home literacy resources among parents surveyed. Specifically:

- Parents at Time 2 reported significantly more children’s books in the home, compared to the same parents’ reports at Time 1. When compared with parents participating in the intensive Family Literacy Initiative, SR parents at Time 2 reported similar numbers of books in the home.

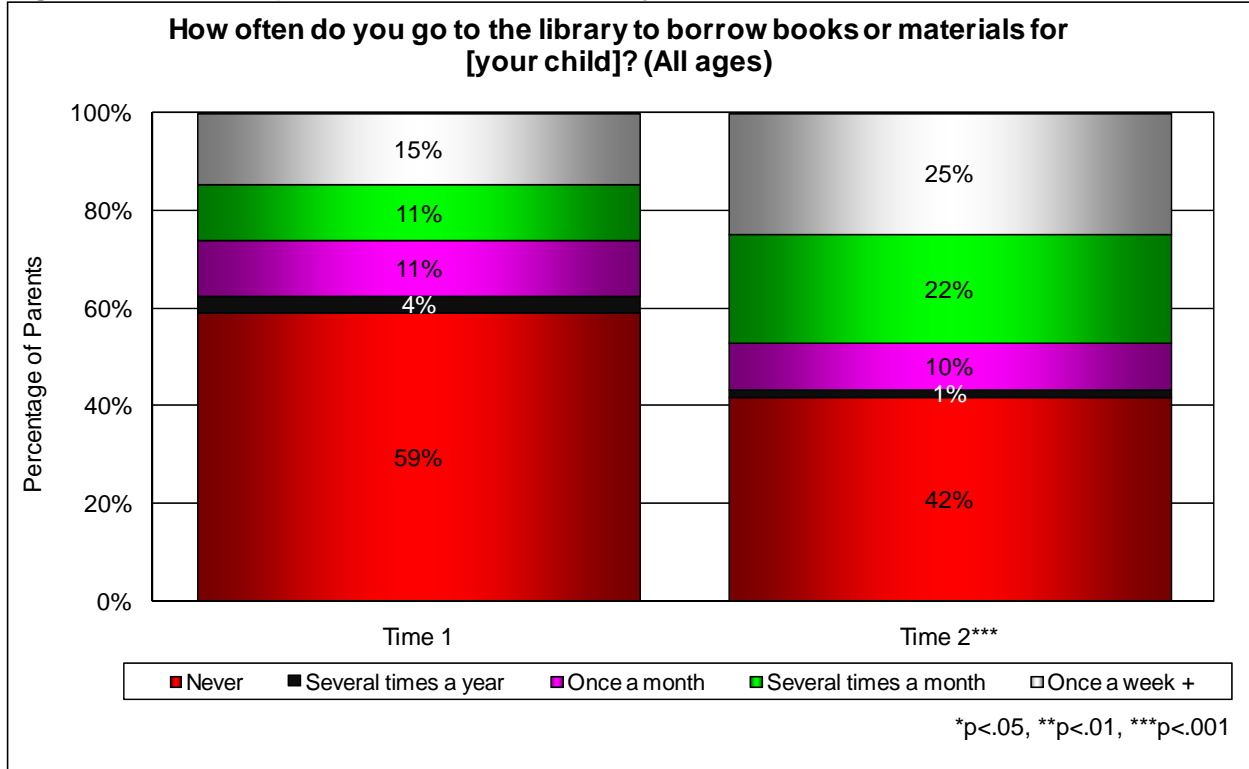
**Figure 3: Parent Report on Children’s Books in the Home**



Source: SR Parent Survey and Family Literacy Parent Survey

- We also considered use of the public library as an alternative to book ownership. On average, parents reported significantly greater frequency of use of the public library to borrow books or materials for their child at Time 2, compared to Time 1.

**Figure 4: Parent Report on Visits to the Library with Their Child**



Source: SR Parent Survey

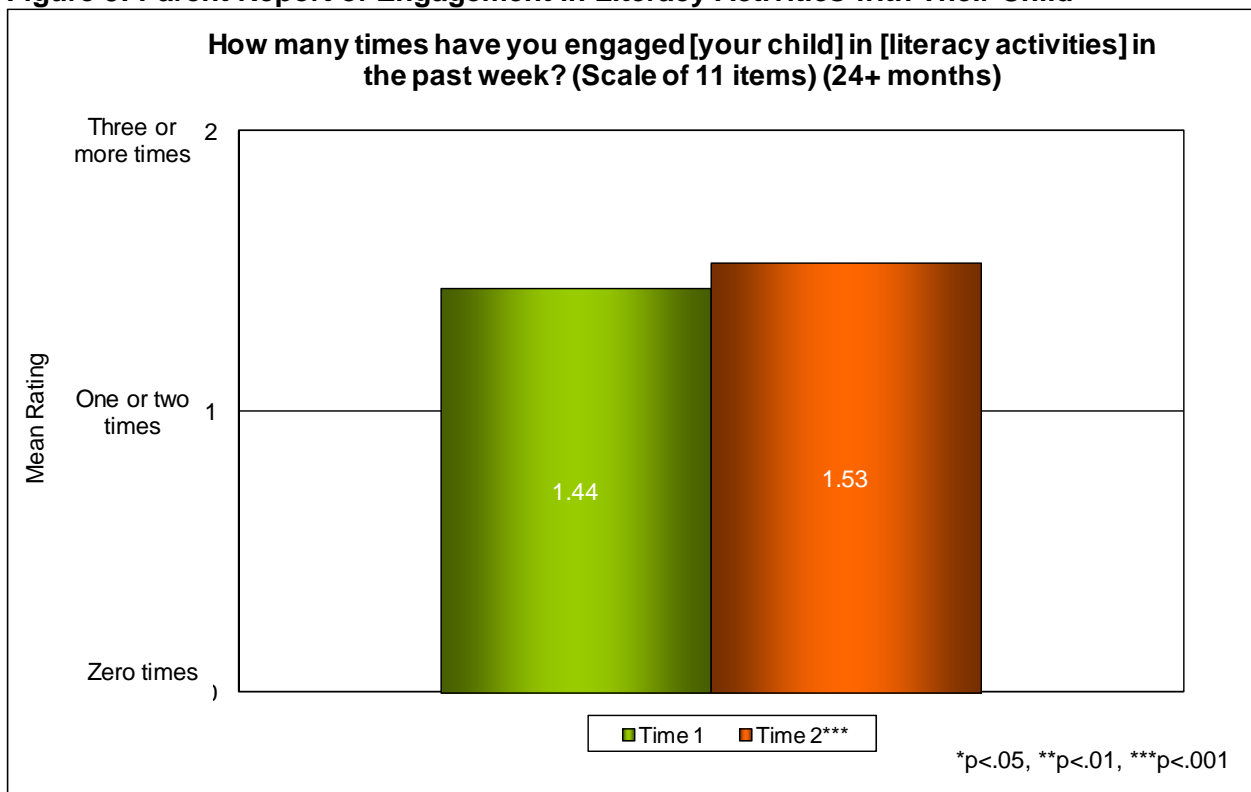
- Grantees also measured changes in home literacy materials in their own evaluations and reported results of their analyses in their year-end reports. In addition to considering the number of books in the home and trips to the library, grantees also assessed the availability of writing and other literacy materials in the home, such as crayons, paint supplies, paper, and so forth. All six grantees reporting on this area indicated increases in the use or availability of literacy resources among parents; four of the six reports highlighted statistically significant growth.

## Support for Children’s Learning and Development – Parent-Child Engagement

In addition to creating a supportive learning environment at home, parents also engage their children in interactive activities that support their learning and healthy development. We asked parents at Time 1 and Time 2 about the frequency with which they engaged their children in a variety of interactive activities. We found small, but statistically significant, growth in a number of areas:

- Among parents of children 2 to 5 years of age, we found statistically significant increases from Time 1 to Time 2 in the frequency with which they engaged their children in language and literacy activities such as telling stories, learning about rhyming words, and practicing the sounds that letters make.

**Figure 5: Parent Report of Engagement in Literacy Activities with Their Child**



Source: SR Parent Survey

- In addition, when we consider a wide variety of activities, from language and literacy activities to playing games and working on art projects together, we found significant increases from Time 1 to Time 2 on interactive activities in general.

Parent focus group results support the survey findings. Fourteen parents across the five programs visited said they felt the SR programs had taught them how to support their children in learning language and literacy skills. Learning by playing was the most common strategy reported by parents, but there were many other good examples of activities teachers have taught parents to use to support their children’s learning. For example, one parent said:

*I remember in one of the workshops, the presenter said to speak 2500 words to your children*

*everyday. I said “I think we already do that” and they said, “No, count your words.” So if [our children] ask, “Are we leaving?” instead of saying “Yes,” you should say, “Yes, we are leaving in 10 minutes. We are going here and doing that. Then we will come back.”*

In cases where children have a speech delay, parents were told to motivate children to speak. For example, one parent said:

*They explained that we had to ask them why they are pointing – what it is that he wants. And then say, “This is called this – try to say it.” And, “What do you want it for? To look at it? To play with?” So he would say, for example, “Mom, I want that book to read,” and we motivated him to speak.*

We did not find consistently positive growth in parent-child engagement on other measures in the parent survey, however. For example:

- We did not find significant increases in the frequency with which parents of children birth to age five reported reading to their children. However, it is important to note that overall, parents reported relatively frequent reading with their children at Time 1, leaving little room for growth at Time 2. When asked how many times in the past week parents read to their child, parents reported an average of 1.86 at Time 1 and 1.87 at Time 2 where zero equals no reading during the week, 1 equals reading one to two times per week, and 2 equals reading three or more times a week.
- In comparison with parents from Family Literacy programs, SR parents read to their children significantly more at Time 2 than Family Literacy parents who reported average reading frequencies of 1.58.
- When comparing with Early Head Start samples, we looked at the percentage of parents who said they read to their child at least everyday. SR parents at Time 2 were significantly less likely than Early Head Start treatment group parents to report reading to their child at this rate, though they were no different from control group parents from the EHS study.

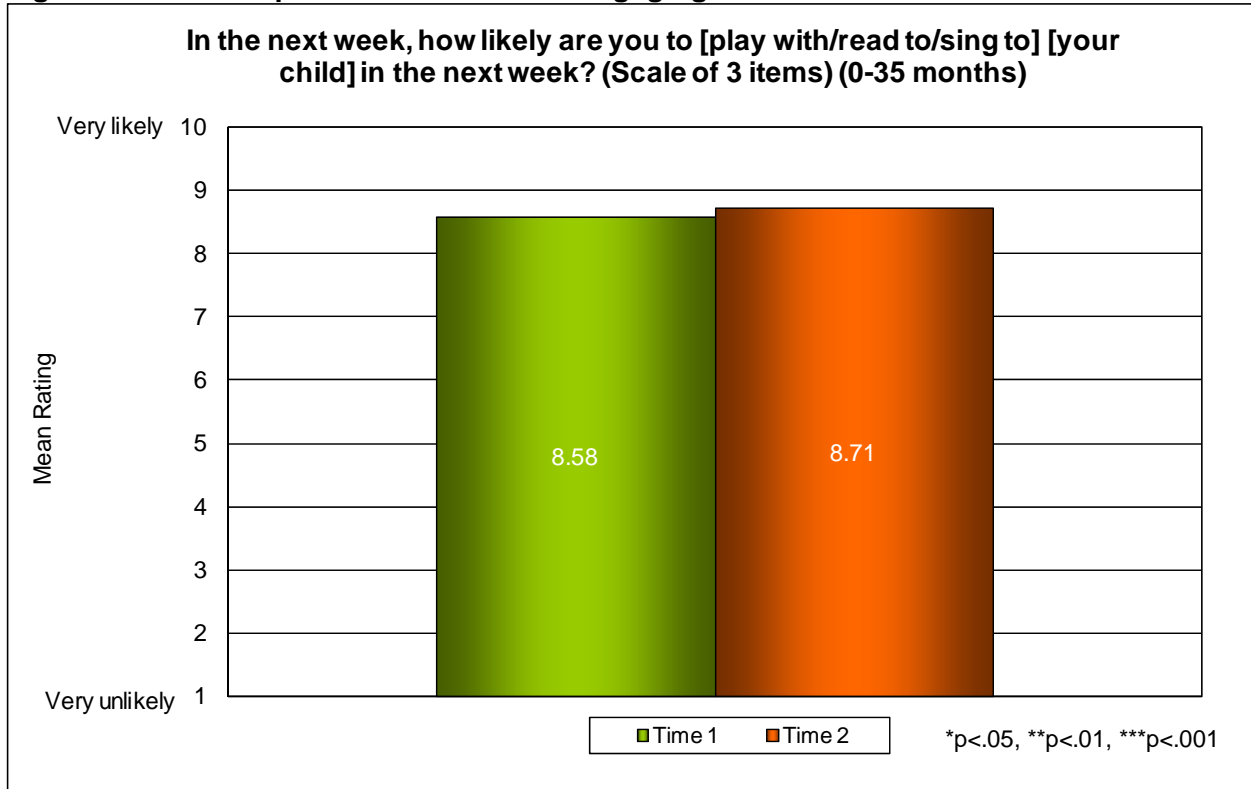
On the other hand, parents in focus groups talked about strategies learned for reading with their children. This was mentioned by four parents in two different programs. These parents talked about how they and their children learn together. For example:

*With books for instance, before we would read books, but it wasn't explained. I would read, “The strawberry is red. You eat it.” And that's it. After taking parenting classes, we read, and [the teachers] would explain, “You should say, ‘The strawberry is good. Do you like to eat strawberries?’ And, ‘What color is the strawberry?’” To engage and open up the children's minds. And my own mind opens up too because I didn't know the strawberry was “red” [meaning the word red in English]. ...Now I do that. If we go out somewhere, I ask things like, “What are you doing?” “Do you like it?” “What did you do?” and he asks me too. He will ask me more, and it has helped me a lot in the sense of opening up my mind.*

In the parent survey, we also asked parents of children birth to age 3 about activities in which they engage their children. Specifically:

- We asked parents about the likelihood that they would engage their children in a variety of activities (including singing to them, reading to them, and playing with them) in the next week. Although changes were in the positive direction (from 8.58 at Time 1 to 8.71 at Time 2), we did not find statistically significant growth among these parents from Time 1 to Time 2; but again, ratings were very high at Time 1<sup>9</sup>.

**Figure 6: Parent Report on Likelihood of Engaging Their Child in Activities**



Source: SR Parent Survey

- Parents of children birth to age 3 who participated in program activities that involved parents and children interacting together (such as “Mommy and Me” classes) did demonstrate statistically significant growth on this measure, reporting increased likelihood of engaging in these activities at Time 2 when compared to Time 1. (See Appendix C.2 for full results of analyses by activity type.)

## Parenting Style

We asked parents about their parenting style, including their use of routines for their children, their approach to discipline, and their role as a parent. We found some mixed results in this domain.

<sup>9</sup> It should be noted that these particular items ask about the *likelihood* of doing a particular activity with their child. This type of question may lead to more socially desirable responses than questions that ask whether the activity was actually done in the past week.

### **Routines**

We asked about parents' use of regular routines with the children through the parent survey but did not find significant changes from Time 1 to Time 2. Specifically:

- Parents appeared to be slightly more likely to report that they had a consistent bedtime routine for their children at Time 2, compared to Time 1. However the difference was not statistically significant.
- When comparing these results with those in the Family Literacy and Early Head Start samples, we considered the number of parents who said they had a routine and followed the routine 4 or 5 days during the work week. No differences were found when SR parents were compared to these samples.<sup>10</sup>
- This topic was also not a major focus of grantees' own evaluation efforts. Only two grantee year-end reports measured parents' use of regular routines, though both reported positive change over time. Only one of these reports discussed their findings in terms of statistical significance; that grantee did report statistically significant growth in parents' use of regular routines.

### **Discipline**

Although learning about discipline was one of the most commonly cited benefits of parents' participation in School Readiness programs in focus group discussions with parents at all five sites, we did not find significant changes in parents' reported use of or dispositions regarding discipline.

- There were no significant changes in parent reports of their ability to stick to their rules or feeling that they had the "energy to make [their] child behave" from Time 1 to Time 2. Parents rated their behavior on a scale of 1 to 5, where 1 is "exactly like me" and 5 is "not at all like me;" mean scores at Time 2 on these items were 2.62 and 2.87 respectively.
- There was also no significant change in parent reports of spanking their children when they misbehave or act up from Time 1 to Time 2 among parents of children ages 1-5. Less than one quarter of parents at each time point reported spanking their child. Similar percentages of parents participating in the Family Literacy Initiative reported spanking their children.

Change in discipline strategies was a major theme in parent focus group discussions. Eighteen parents across five programs mentioned that they had learned effective techniques for supporting their children by teaching them with appropriate discipline techniques and by becoming more patient themselves. One strategy parents described for becoming more patient with their children was to develop their understanding of the way children communicate. Many parents proudly talked about how they now are able to talk to their children in a way that will help control their child's frustration when they are having trouble expressing themselves. Parents also mentioned being able to control their own temper and frustration with their children. For example, one parent said:

*Now I try to calm down and calm him down. I let him know I am there for him and would like to know what the problem is and maybe show him how to solve it.*

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<sup>10</sup> Significantly more SR parents had a regular routine compared to the parents of 24-month-old children in the control group of the Early Head Start study.

Parents also reported learning about how to discipline their children in a different way. They mentioned cultural differences between the U.S. and their home countries in the ways that children's misbehaviors are handled. Parents talked about the process of incorporating techniques from the new culture:

*The truth is, and I think it happens to many of us is that we are used to doing things differently in our own countries and disciplining in a different way. One thing we do is we spank them, and we speak to them harshly so that they recognize and differentiate the tone of voice when we are mad or even happy so that they understand what we want from them. Here I have learned to be more patient and understanding when they cry and when they throw a tantrum.... I was very impulsive with my first child. When I brought him, I would get mad at him very suddenly. I would yell and spank him. Here at the [SR] program they would explain to us that instead of yelling and spanking, to put ourselves in their place, to speak to them and try to understand them. They are not able to express themselves, so they throw tantrums, but we need to be able to differentiate their behavior to know what they want – attention, if they are hungry, or want to play.*

Nine grantee year-end evaluation reports assessed parent growth in patience and discipline. All but one reported positive change over time; two reported statistically significant growth (the other reports did not share information on statistical significance). The ninth report found no change from pre- to posttest.

### **Parent Role and Disposition**

Parents in focus groups had much to say about their changing views on their role as a parent. Fifteen parents across four programs mentioned that they felt their role as a parent had changed after being in the program. Some parents thought the way they interact with their children had changed since they started participating in SR activities. For example, one parent described her increased level of involvement with her child:

*I think it taught me to pay more attention to my child, to play with him, help him, and show him more things. Before I would sit him down and let him do things on his own. But we do have to show them things and help them out.*

Focus group parents also reported that they felt they were learning how to become a role model for their children. For example, one parent described it this way:

*I learned that it's not what I say – they learn from what I say and actually from what I do.*

Another parent added:

*If I say something, it doesn't mean [anything], but if I do it, they see that I do it, [and] they will learn from me. That's what I learned here too – it's not just talking.*

Parents in focus groups also discussed how they had learned to support their children emotionally, by helping them become ready for the separation with their mothers when they go to preschool or kindergarten.

*[The program has helped me] to let him to be independent – that I don't have to be there*

*taking care of him all the time.*

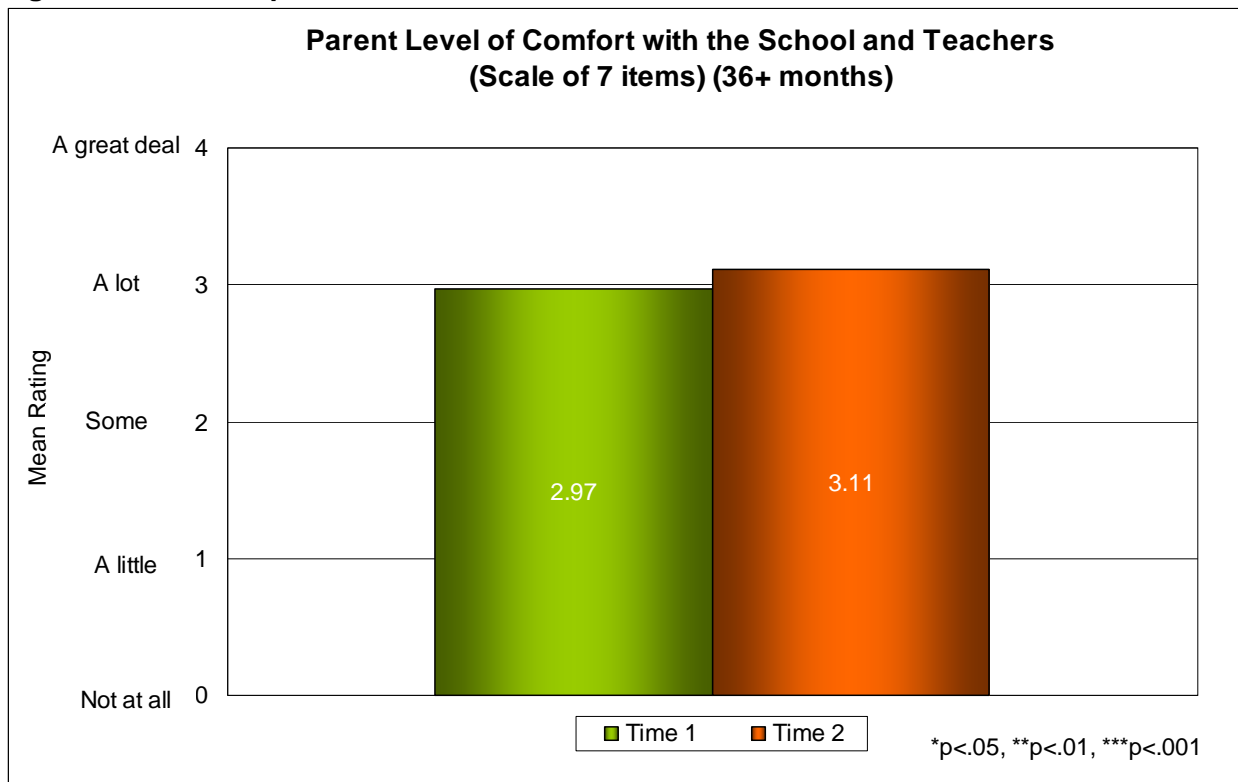
*I learned to let go a little bit. To not be so possessive. I have always been overprotective.*

### Parent Involvement and School Comfort

We examined parents’ “school readiness” by exploring their comfort with and involvement in school (and program) activities as well as their concerns and beliefs about what it means for their child to be ready for school. To assess parent involvement and comfort, we asked parents how comfortable they felt visiting their child’s school or program, how comfortable they felt talking with their child’s teacher, and the extent of their involvement in volunteer activities at the school or program.

- We found no significant change from Time 1 to Time 2 in parents’ reported involvement and comfort with the school among parents whose children were 3 to 5 and attending preschool or childcare. However, parent responses at Time 1 showed they already reported “a lot” of comfort with the school and their child’s teacher, leaving little room for continued growth on this item at Time 2.

**Figure 7: Parent Report on Comfort Level with School and Teachers**



Source: SR Parent Survey

- We did find that parents who received more SR program service during the period between Time 1 and Time 2 surveys showed a significant difference on this scale. That is, even though the average change among all parents who were asked these questions was small,

parents who participated more showed significantly greater growth compared to those who participated less. (See Appendix C.3 for full results of analyses by intensity.)

In our review of grantees own evaluation efforts, we found that seven grantees that assessed parents' feelings about, and involvement in, their child's school or program reported positive change overall; two reported statistically significant growth. Two of the seven grantees also reported mixed results. None of the grantee reports included an analysis of changes in comfort with the school system or parent involvement for parents of children in the birth to 3 age group.

Parents in focus groups were also eager to talk about what they had learned about the K-12 public school system in Los Angeles. Seven parents mentioned learning about how to talk to the school staff to support their child academically or emotionally. For example, one parent said:

*Right now I don't have children in the school, but what I have learned is that if I see that my child is sad [and] he doesn't like to go to school, then something is wrong. And [I learned] what I can do to approach the school. I can't simply walk up to the teacher, because there is a process to find out what is going on with my child. ...[I learned] how I can ... set up an appointment, what rights I have as a parent to know what is going on with my child, to get him to school so that he gets the education he needs.*

Parents in focus groups at two sites mentioned they received specific workshops about how to participate in school and why it is important. Parents felt these workshops had given them useful tools to help them feel more confident when participating in their children's school. For example, one parent said:

*The director [of a local pre-school] even gave us his mobile phone number. He gave the workshop and now many of us are not afraid of speaking to the teachers because here they teach us we have rights and obligations. ...The workshop leader also gave us a letter [that could be given to the teacher] for the parents who might feel intimidated speaking to the teacher.*

Another parent added:

*[The director] said she didn't want us to see [the teachers] as inaccessible. Maybe for outgoing people who are not afraid to speak up that is good, but for those who are still afraid, the letter was an excellent way. They show us how to communicate.*

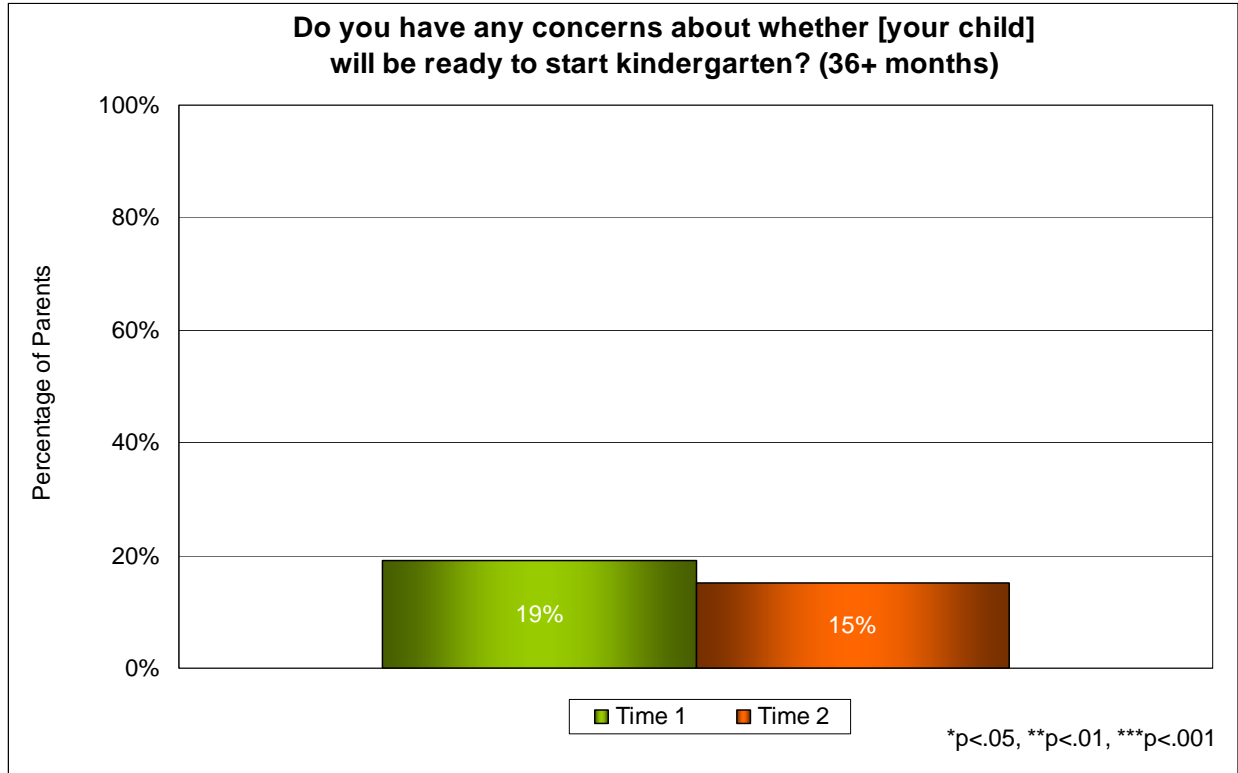
Another parent spoke about what she had learned in the program:

*To always communicate with our children's teacher. And if you have questions, to make sure and set up meetings with the teacher to see your child's progress and not wait until it's too late.*

Surveyed parents were also asked about their understanding of expectations for kindergarten entry and their level of comfort with their child’s readiness for school at Time 1 and again at Time 2. No significant changes were observed. Specifically:

- Although parents appeared to be somewhat less likely to express concerns about their child’s readiness for school at Time 2 compared to Time 1, suggesting increased comfort levels with expectations for kindergarten entry, this difference was not statistically significant.

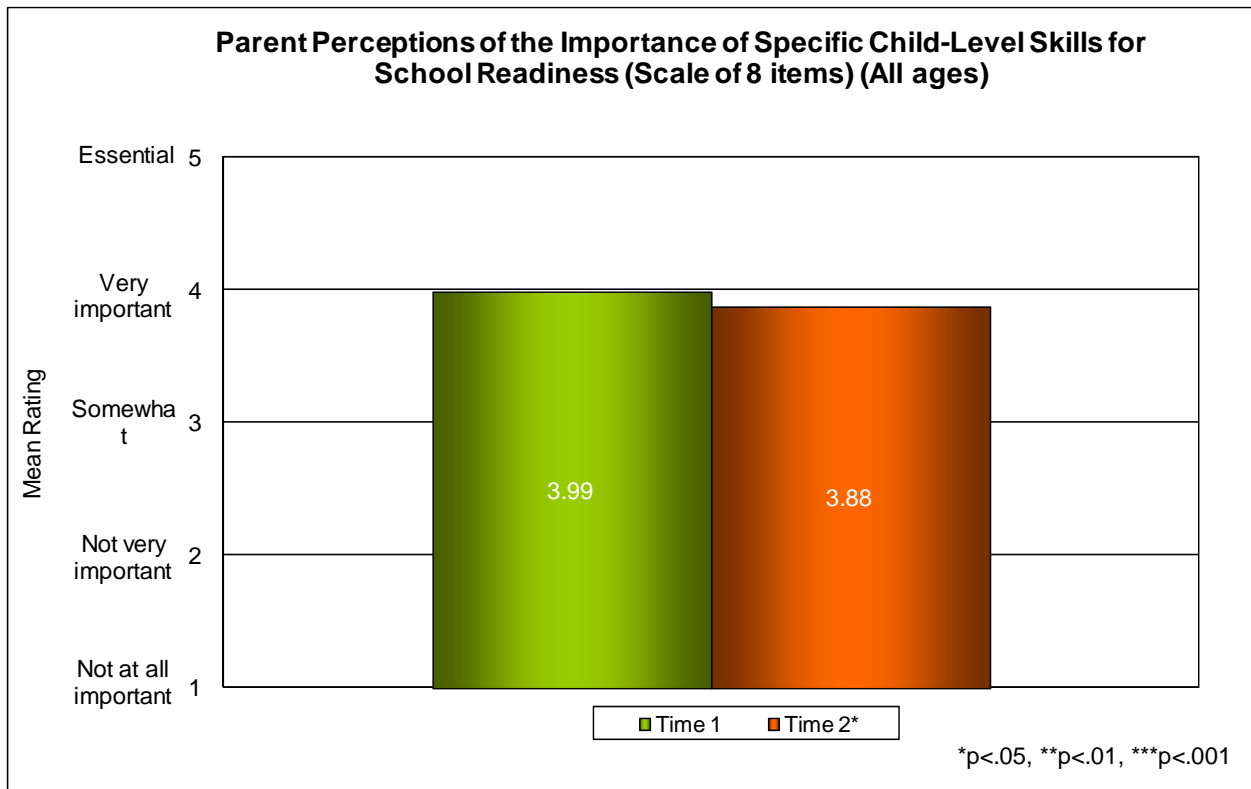
**Figure 8: Parent Report on Their Concerns about Child’s Kindergarten Readiness**



Source: SR Parent Survey

- When asked to rate the importance of various child-level skills for being ready for kindergarten (such as being able to count to 20, take turns, sit still, and pay attention), parents reported lower ratings at Time 2 compared to Time 1. Although the absolute difference in ratings over time was small, it was a statistically significant change. According to input received from the grantees and their local evaluators who comprise the “School Readiness Evaluation Workgroup,” this finding may relate to parents’ development of somewhat more realistic (and appropriate) expectations for what a child should know and be able to do by kindergarten entry through their participation in SR programs.

**Figure 9: Parent Report on Importance of Specific Child-Level Skills for School Readiness**



Source: SR Parent Survey

- In addition, when examined individually, only the two most academically focused individual items that comprise this scale – being able to count to 20 and knowing most of the letters of the alphabet – showed a statistically significant decline in parents’ ratings of importance from Time 1 to Time 2. Again, this may suggest that parents’ expectations (especially with regard to academic skills) were becoming more realistic through their participation in the program.

Parents in focus groups had more to say on this subject. Eleven parents from four sites stated that their program taught them about what their children needed to know before going to kindergarten. The school readiness skills that parents reported learning about varied widely. Some examples were related to physical and motor skills (e.g., knowing how to use the scissors, going to the bathroom on their own, washing their hands, putting on their shoes and clothes). Others talked about academic skills like knowing colors, shapes, and the alphabet. Other ideas involved language and literacy

skills, such as improving their speech, knowing and being able to write their own name, knowing how to interact with books, and knowing their address and phone number. Some ideas were more social-emotional, like knowing how to share. For example, one parent said:

*I think that because when I took classes [the teacher] let us know what they needed to know to enter kindergarten, such as knowing and writing their own name, knowing their address, phone number, parents names, knowing and recognizing the alphabet, and knowing what each letter means. And, well, my son knows all this!*

Two parents from the same program reported they did not receive this kind of information from their program, but that they would like to in the future.

*Maybe it is something I would like added to the program, if they could to prepare something about who to speak to and things they need to learn before they go to school. These would be things we need to work on with them specifically and maybe something we can add.*

## **Parent Support and Resilience**

Another important outcome for parents involved changes in the support system they have around them to ensure that they will be able to continue to support their children's learning and healthy development even without program services. We found positive changes on both of the measures of social support assessed:

- When asked about supports available to them if they had a problem and were feeling depressed or confused about what to do, parents named more support people at Time 2 (2.2 people on average) compared to Time 1 (1.8 people), and the difference was statistically significant. This finding held up for parents in parenting classes as well as those participating in parent-child activities, but not for parents receiving home visits, suggesting that parents may be increasing their peer networks through participation in on-site program activities.
- In addition, when asked who they could go to for advice or information about the care of their child, parents named significantly more support people at Time 2 (1.6 people) compared to Time 1 (1.3 people).

Parent focus groups also reflected this finding. Five parents across four sites reported seeing their programs as a support network. Parents said that they feel they can bring their problems to the program and figure out how to solve them together as a group. Some examples that describe this feeling:

*It's like a support group. You learn from other parents what to do and what not to do*

*One thing is that here, aside from learning, we help each other out like family. We make new friends. It is overall good for our children, like for their birthday parties, we will call each other up and the children see each other again and they are so happy. So, it is like part of our family.*

*I don't have any family here, so I like the support that they give me.*

Not only have relationships with other parents been crucial for participants to feel supported, parents also feel they can trust staff and receive the support they need to become confident in their

environment. Eight parents across three sites stated that they feel supported by staff and encouraged by them to be better parents. For example, parents said:

*They have really qualified staff, not only the teachers, but also the people working in the offices. They are amazing – they know everything. You can ask them any question, and they always have an answer: ‘Yes, I can hook you up with somebody for that issue.’*

*I like the professionalism that the personnel demonstrate through the classes. The trust we have in them, the fact that they make us feel at ease and confident that we can talk and ask questions, and focus and participate*

*I speak to the teacher about my concerns, and she gives me encouragement and lets me know that all children learn at a different pace.*

Some other parents also said they feel more confident as mothers now. For example, one parent said:

*I used to judge myself, ‘Oh, I’m a bad mom. I’m not doing it right.’ But I realize that we’re figuring it out together.*

## **CHILD OUTCOMES**

To assess child outcomes, we used two approaches. The primary approach involved direct assessments of 240 children close to the end of their participation in School Readiness program activities. To supplement the direct assessments, which focused primarily on cognitive outcomes for 4- and 5-year-olds, we also asked parents participating in the parent survey to report on the developmental status of their children. Findings from these two study components are highlighted below.

### **Cognitive Development**

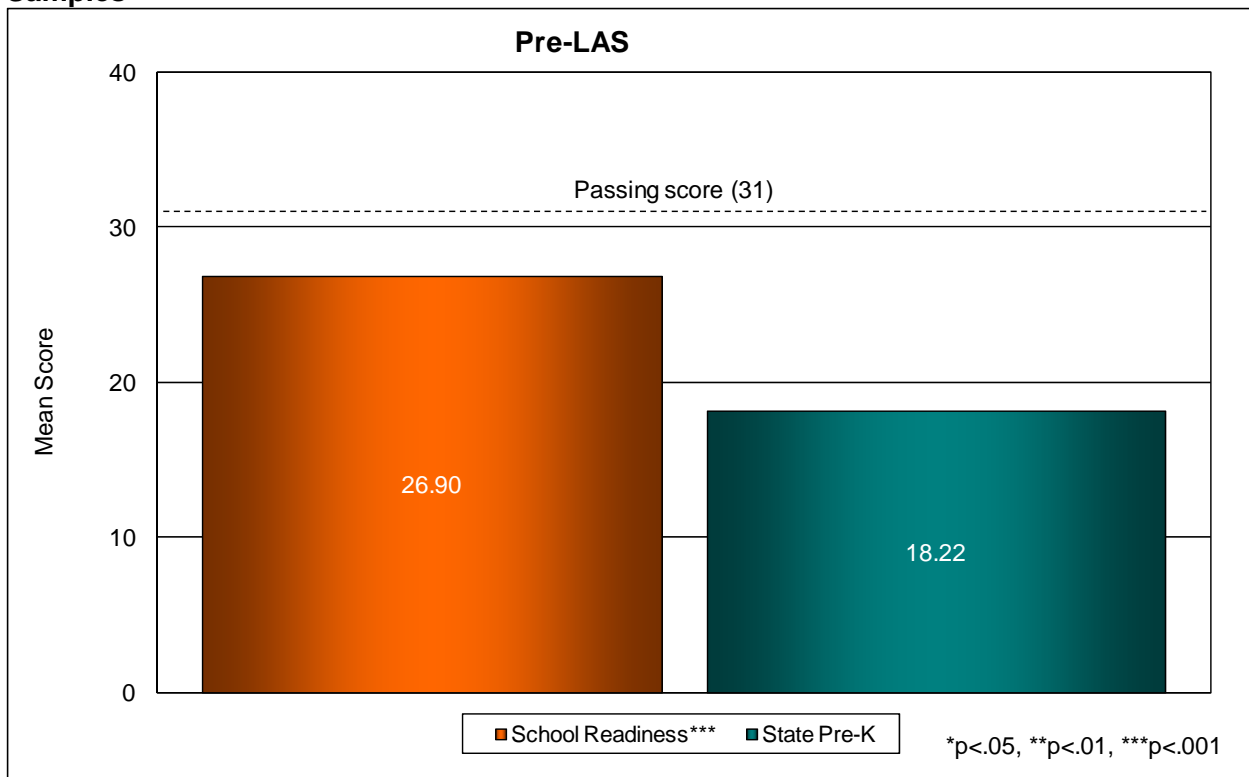
We assessed children’s cognitive developmental status – their language and emergent literacy skills and early mathematics skills – through the direct child assessment component, and we asked parents to report on their children’s status as well.

### Language Skills

Direct child assessments included a measure of children’s English language skills (Pre-LAS), as well as their receptive vocabulary in English (PPVT-III – for those children who passed the language screener) or Spanish (TVIP).

- Of the children who were identified by the teacher as having Spanish as their home language, approximately half passed the Pre-LAS language screener, (a score of 31 or higher out of 40) which indicated they were proficient enough in English to be assessed in English. Pre-LAS scores for children in SR programs were, in fact, significantly higher, on average, than scores for a demographically similar population of children enrolled in State Preschool.

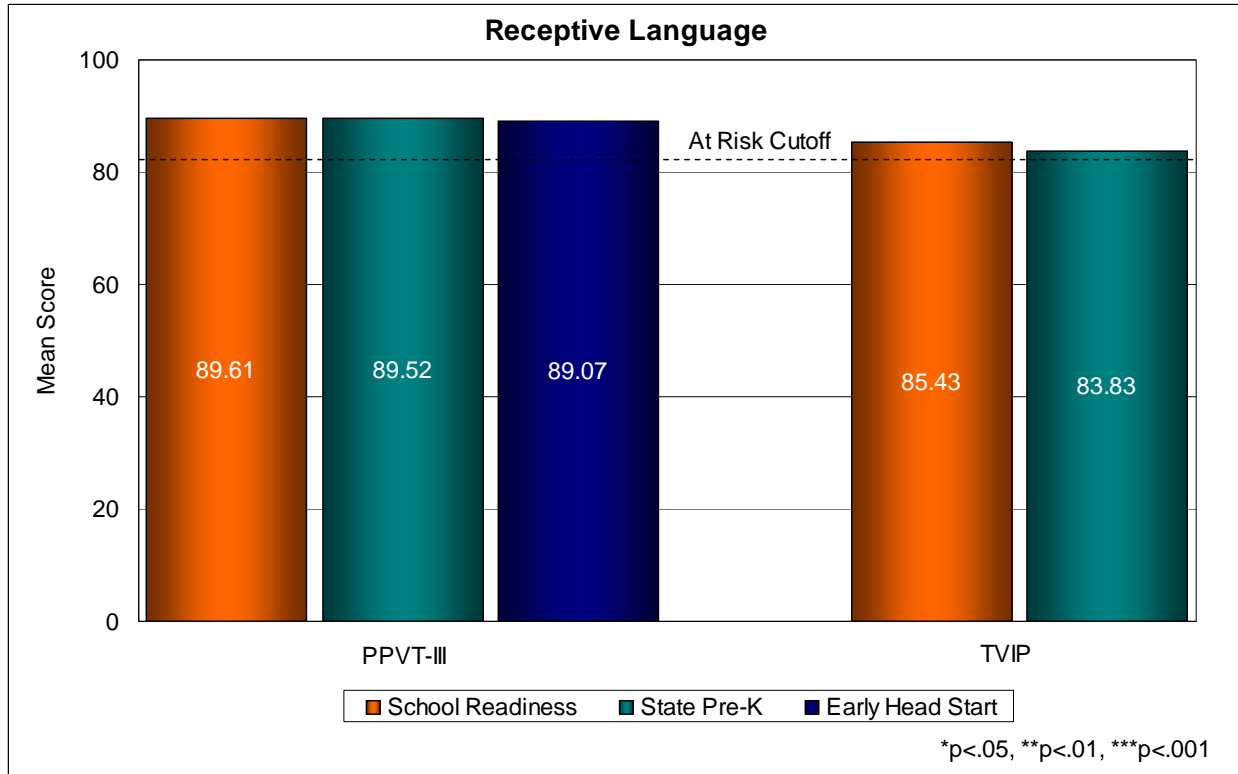
**Figure 10: Mean Scores on English Language Screener (Pre-LAS) for SR and State Pre-K Samples**



Source: SR Direct Child Assessments and State Pre-K data

- Average receptive language scores on the PPVT-III/TVIP were below age norms, though this is not surprising for this population. Just over half of the children assessed in English scored above 85 percent, which is the cutoff for considering a child “at risk”; just under half of the children assessed in Spanish scored above this mark. Mean scores on both the English and Spanish versions of this assessment were comparable to scores for similar populations of children enrolled in State Preschool and those participating in the Early Head Start study.

**Figure 11: Mean Standardized Scores on Receptive Language (PPVT-III/TVIP) for SR, State Pre-K, and EHS Children**

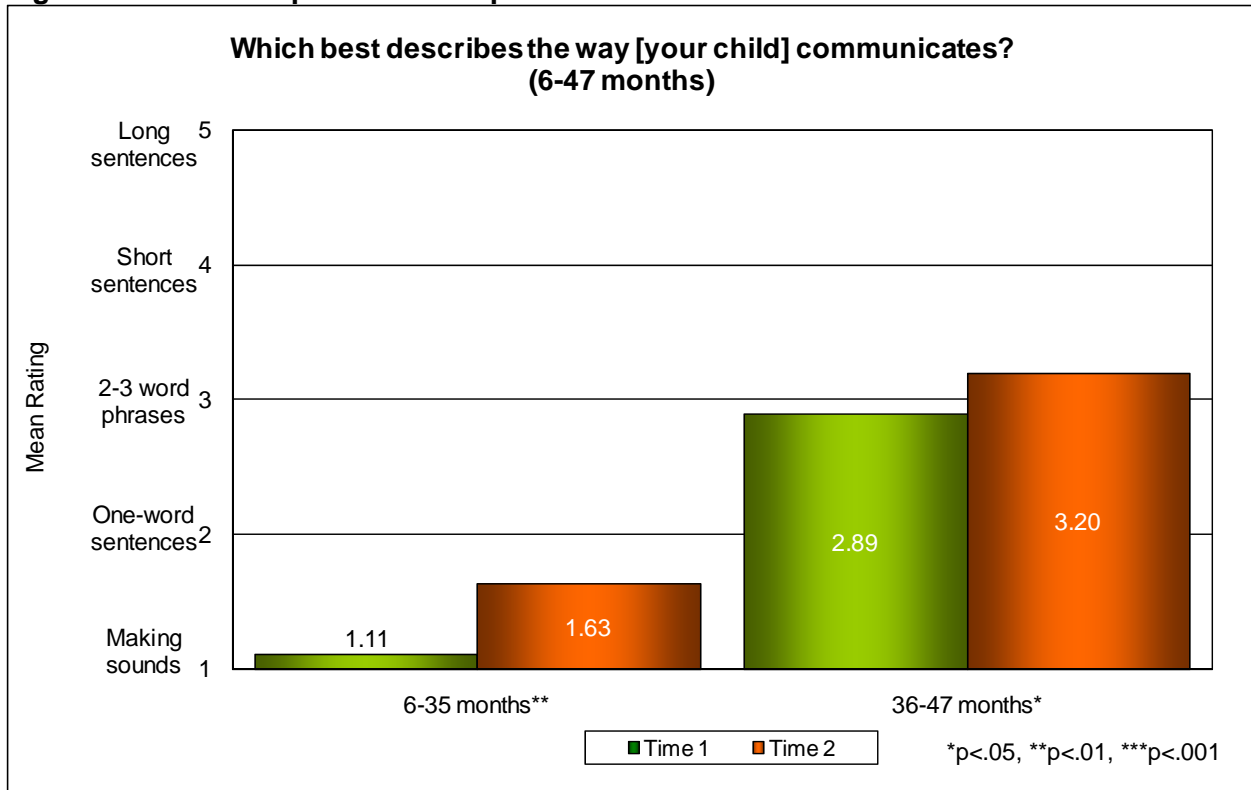


Source: SR Direct Child Assessments, State Pre-K data and EHS data

We found positive and developmentally appropriate growth in children’s language development as reported by parents on the parent survey:

- When asked to characterize the way their child communicates (ranging from mostly communicating needs by making sounds or pointing, to talking in long and complicated sentences), we found parents of children 6 months to 4 years reporting significantly more complex communications from Time 1 to Time 2.

**Figure 12: Parent Report on Description of Their Child’s Communication**



Source: SR Parent Survey

- Significant growth in parent-reported communication strategies was found for children in both age groups, 6 to 35 months and 36 to 47 months. (See Appendix C.4 for full results of analyses by age group.)

These results were also reflected in the parent focus groups. Six parents from five programs mentioned that their children have learned to communicate better and have improved their vocabulary as a result of the SR activities.

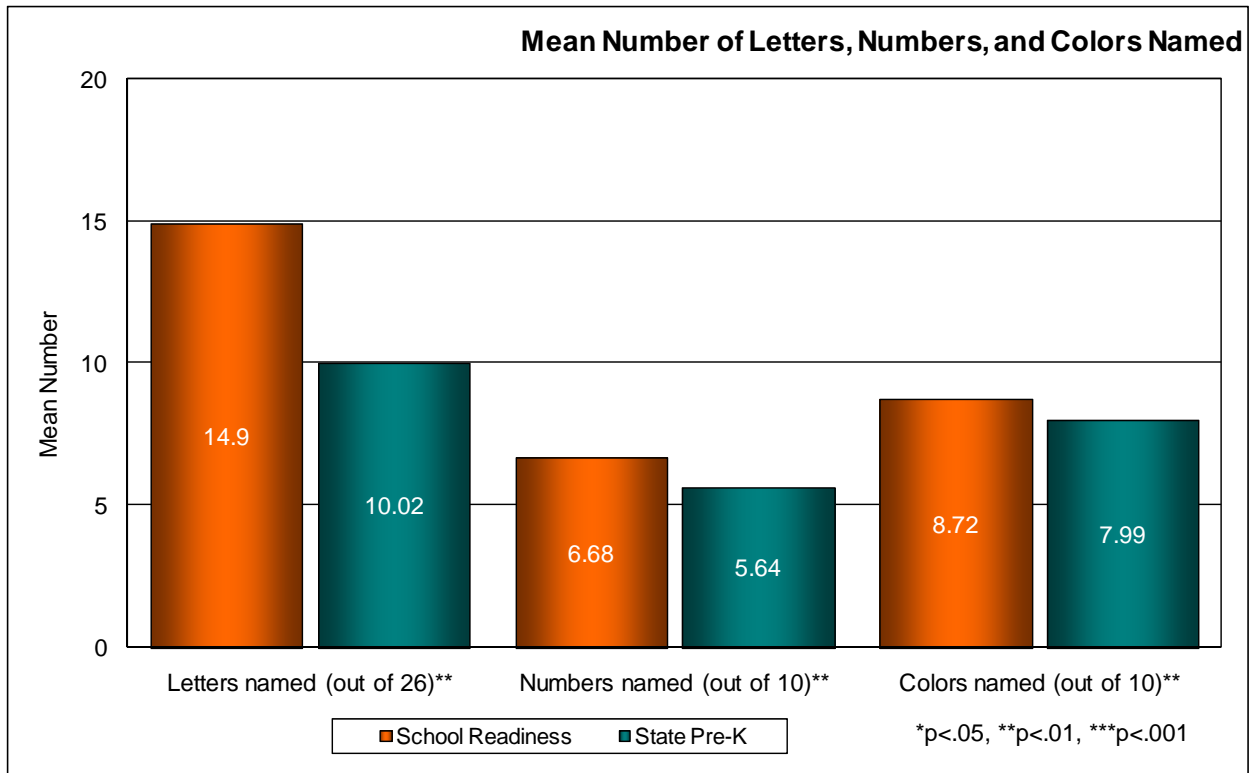
*And more than anything she has developed in many areas. She speaks very well... I am sometimes surprised at how she is able to relate and associate different ideas. This is thanks to her participation in the program. At home I wouldn't be able to do this...*

**Emergent Literacy Skills**

Direct assessments of children’s emergent literacy skills included several measures, including children’s ability to name letters and colors and their understanding of basic story and print concepts.

- On average, SR children were able to name approximately 15 letters, nine out of ten colors, and seven out of ten numbers. This is significantly more than demographically similar children participating in State Preschool, who were able to name ten letters, eight colors, and six numbers. In addition, a small but statistically significant correlation suggests children who had been participating in SR programs for a longer period of time could name more letters and numbers than children who had participated less.

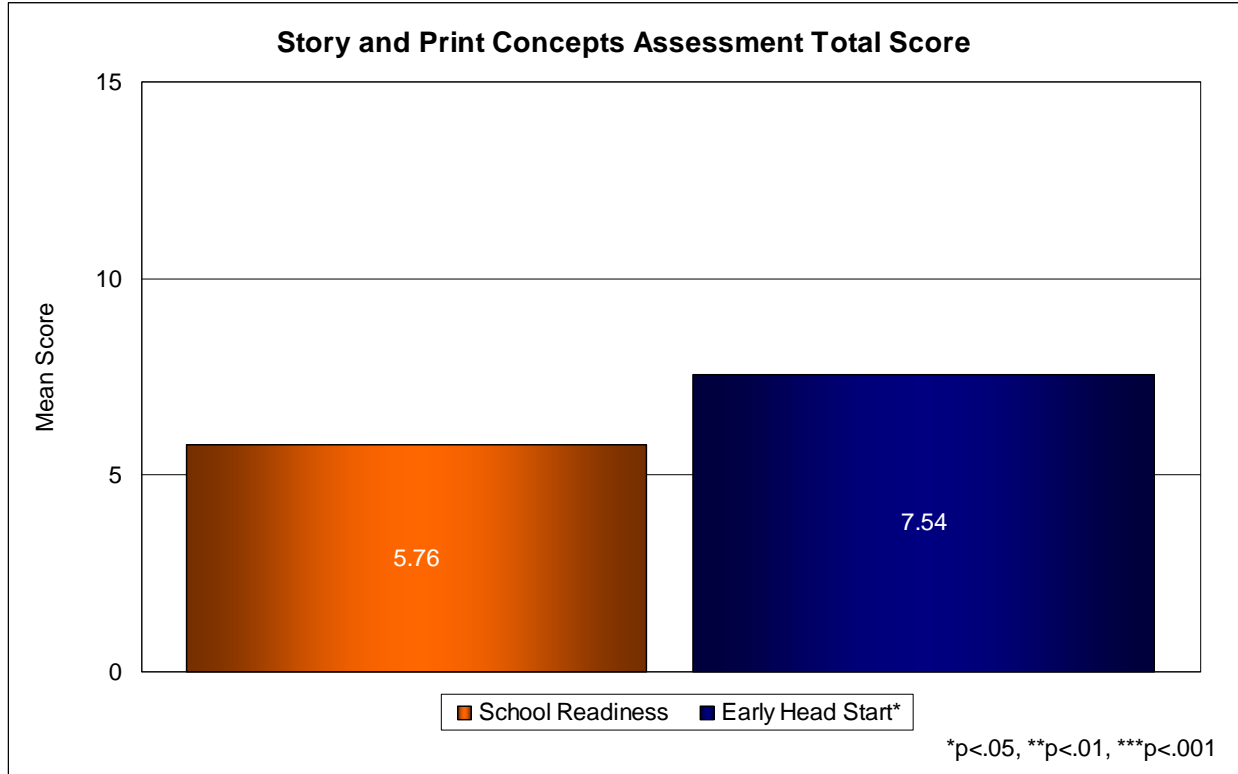
**Figure 13: Mean Number of Letters, Numbers, and Colors Named for SR and State Pre-K Children**



Source: SR Direct Child Assessments and State Pre-K data

- Children’s awareness of story and print concepts, such as how to hold a book and where to start reading, as well as basic story comprehension, was lower for SR children as compared to demographically similar children participating in the Early Head Start study.

**Figure 14: Mean Scores on Story and Print Concepts for SR and EHS Children**



Source: SR Direct Child Assessments and EHS data

As for children’s emerging literacy skills reported by parents on the parent survey, we found no significant growth from Time 1 to Time 2 in survey responses for parents of children in the birth-to-three age range.

- When asked about pre-literacy skills such as taking an interest in books by playing with them or listening while parents read, parent reports of the frequency of emergent literacy behaviors among their young children – those birth to age 3 – did not show significant growth from Time 1 to Time 2.

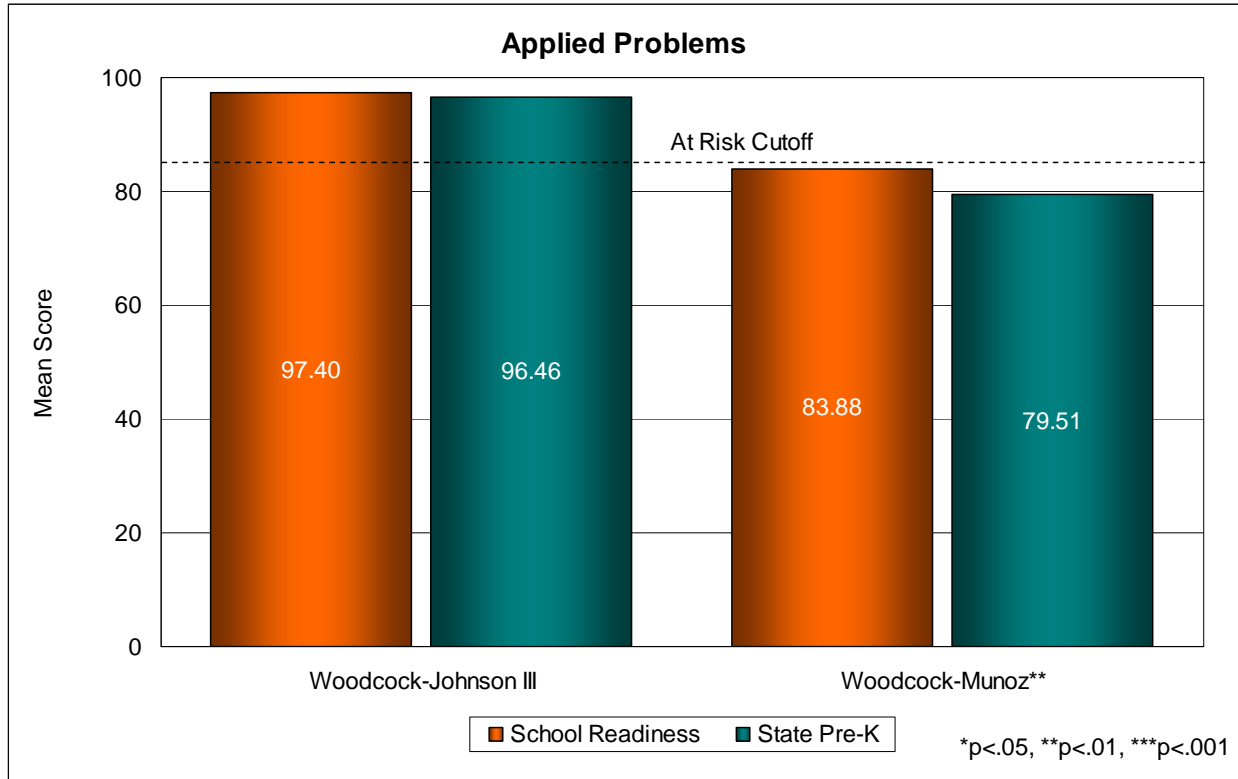
**Early Mathematics Skills**

Children’s early mathematics skills were assessed using the Woodcock-Johnson (and its Spanish version, the Woodcock-Muñoz) Applied Problems subtest, as well as a counting objects task.

- Children who were assessed in English scored relatively high on an assessment of their problem-solving skills (Woodcock-Johnson Applied Problems), scoring very close to the national norm, with more than 90 percent scoring above the “at risk” cutoff of 85 percent.
- Children who were assessed in Spanish scored somewhat lower; half scored above the 85 percent “at risk” cutoff, and half scored below 85 percent. However, SR children

outperformed children attending State Preschool on the Spanish version of the Applied Problems subtest. In addition, results suggest a significant correlation between the number of months spent in the SR programs overall and children’s scores on the Applied Problems subtest, at least for Spanish speakers.

**Figure 15: Mean Standardized Scores on Applied Problems (Woodcock-Johnson/Woodcock-Muñoz) for SR and State Pre-K Children.**



Source: SR Direct Child Assessments and State Pre-K data

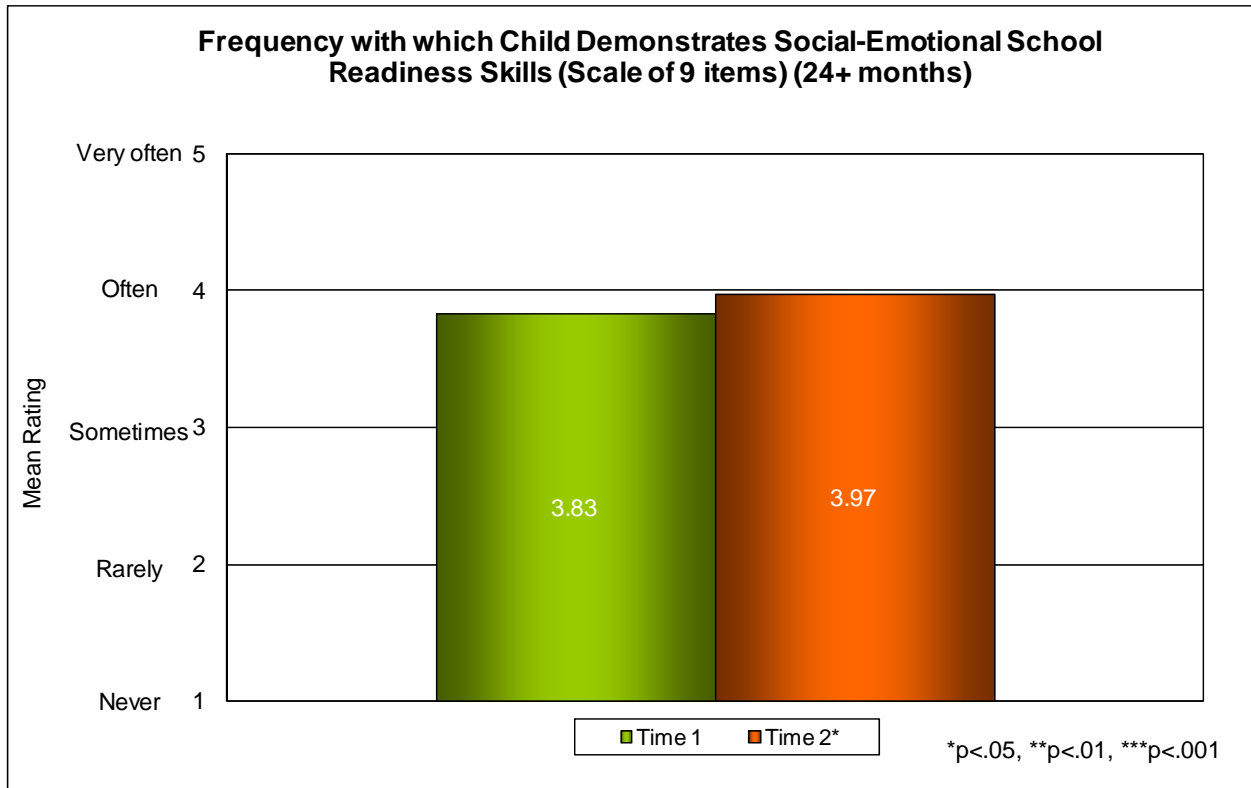
- SR program children were able to count 17 objects on average, comparable to the counting skills of children in State Preschool programs.

## Social-Emotional Development

Children’s social-emotional development was assessed primarily through parent responses on the survey.

- Parent reports of children’s social-emotional development (as measured by behaviors such as sharing toys with other children, paying attention well, and comforting other children who are upset) showed small, but statistically significant, increases from Time 1 to Time 2 among parents of children ages 2 to 5 years.

**Figure 16: Parent Report on Frequency of Their Child Demonstrating Social-Emotional School Readiness Skills**



Source: SR Direct Child Assessments

- On the other hand, for younger children (birth to 3 years), parent reports of social and interpersonal skills (such as showing interest in other children by turning toward them, by watching them while they play, or by reaching for a toy they are playing with) did not show significant change from Time 1 to Time 2.

Parents also reported on their child’s social-emotional development during focus groups. Twelve parents from all 5 sites visited reported that SR activities have helped their children to be more independent and gain more confidence. Parents spoke about how their children have become more comfortable being away from them:

*My daughter is almost three so she’s going to start preschool. Now she is more comfortable, she can stay there by herself, she doesn’t need me as much. She knows that she’s going to be with*

*more kids. I don't think she's going to be crying like in the beginning. She didn't want to be a part of it.*

Three parents from three different sites specifically reported that their children have learned how to share as a result of their participation in the program.

*My daughter didn't know how to share toys. Now when her cousins come to the house and they start fighting for toys, she is the first one to say, well we have to share. She starts telling the kids to share. I was surprised! And everyone would say, "Oh, she's so little, and she knows this." She learned that, and she's trying to share it with her cousins...[She learned this in] Mommy and Me... she remembered the song "Sharing."*

Nearly all (20 out of 22) of grantee year-end reports reviewed for children's outcomes reported on positive changes in children's social-emotional development, including children's self-awareness, social and interpersonal skills, self-regulation, and communication and language skills. Seven grantee reports included findings related to self-awareness and self-concept. Six of these seven grantees reported positive changes among children; two of these reported statistically significant growth. Seven grantees also presented positive findings related to children's social and interpersonal skills. Three of these reported statistically significant growth in this area. Four grantees addressed positive results in self-regulation in their evaluation reports, one of which reported statistically significant growth in this area.

A significant focus of those grantee reports that addressed social-emotional development was on communication and language. Fourteen grantee reports included such a focus with positive changes over time. Five reported statistically significant growth among children. One grantee reported some mixed results.

## **SUGGESTIONS FROM PARENTS FOR PROGRAM IMPROVEMENT**

The focus groups provided some important feedback for SR programs. All parents across all five focus groups conducted reported that they were very satisfied with the services received through their SR programs. However, several suggestions for program improvements came up during focus group discussions. The most striking proposals for program improvement were about the length of the classes. When asked for suggestions, 19 parents across all five programs said they thought classes should be more intensive in terms of the frequency of meeting times or the hours of the classes. This sentiment was also reflected in the Time 2 parent survey, where 18 percent of the parents said that they would like the program to expand more in terms of days, hours, or frequency of classes.

Parents across all sites included in the focus groups also indicated that they wanted additional classes to be offered, such as classes for husbands, classes for older children (six years of age or older), or summer classes.

Some parents also offered suggestions for changes in program operations and infrastructure. For example, four parents across two sites talked about the need to improve their classroom environment by either having the program in its own building or separating co-occurring activities into different rooms. Three parents across two programs mentioned that the way information is communicated regarding current and upcoming SR program activities should be improved.

Other issues that some parents mentioned related to the difficulties in finding transportation to get to the activities, the need for more staff to conduct or assist in activities, and concerns about the cancellation of activities that parents had enrolled in.

## **CONCLUSIONS AND RECOMMENDATIONS**

Even though the time period for this evaluation was relatively short, a number of modest but encouraging results were found in the areas of parent and child outcomes that support school readiness. For parents, we found small but statistically significant gains on knowledge measures such as the parents' knowledge of the best time to start reading to children and the importance of a child's experiences in the first year of life. There were also small but statistically significant gains on parent's home literacy resources for children, such as the number of books in the home and the frequency of library visits, as well as parents' engagement in literacy and other activities with their 2- to 5-year old children, such as telling stories, teaching songs and letters, playing games and working on art projects together. Parents of children from birth to 3 who participated in parent-child oriented school readiness activities also showed significant growth in their reported likelihood of engaging their children in interactive activities at home (such as playing, singing, or reading with their children). Parent reports of their social support networks also showed statistically significant gains from Time 1 to Time 2, and this finding was especially strong for parents participating in center-based as opposed to home-based services.

When looking at results for parents in relation to the intensity of participation in the SR program or the activity type, we found few significant differences. However we found that parents who participated more in SR activities between the Time 1 and Time 2 surveys showed significant growth on measures of parent comfort and involvement with their children's school (or program) and teachers, although a large proportion of parents expressed "a lot" of comfort with their child's school and teachers at Time 1. In addition, parents who had participated more in SR activities prior to Time 1 rated the importance of play as a learning opportunity for young children significantly higher than those who had participated less. As discussed earlier, it was somewhat challenging to examine associations between parents' intensity of participation and their outcomes because consistent and reliable data on hours of attendance were not available at the participant level other than through the estimates provided by parents themselves.

For children, parents reported small but statistically significant gains in their child's communication skills and their social-emotional school readiness skills. When children were assessed directly using standardized measures (in English or Spanish as appropriate), we found some small but statistically significant differences for SR children compared to similar samples of children on the same measures. SR children had higher scores in English proficiency and could name more letters, numbers and colors than comparison samples. Spanish speaking SR children also had slightly higher scores on applied problems (mathematics) assessments than comparison samples. Story and print concept scores were slightly lower for SR children, however, compared to similar samples. There were also small but significant correlations between children's intensity of participation in SR programs and their emergent literacy skills such as naming letters and numbers, and, for Spanish speakers, their scores on the applied problems measure.

## **Implications of Findings for Grantees**

A number of findings presented in this report warrant highlighting, along with suggested implications for program practice. Selected findings for parent and child outcomes and related suggestions for programs, are discussed below.

### **Parent Outcomes**

- At Time 2, we found increased frequency of library use by parents to borrow books or materials for their children. Having ready access to literacy resources in the home is important for parents and children; thus programs should continue to encourage library use on the part of parents so that they and their children.
- While we found statistically significant increases from Time 1 to Time 2 in the frequency with which parents of 2- to 5-year-olds engaged their children in language and literacy activities overall, such as telling stories, learning about rhyming words, and practicing the sounds that letters make, programs should consider greater encouragement of parents' daily reading to their children, as this is an evidence-based practice that supports positive child outcomes.
- Parents of children birth to age 3 who participated in program activities that involved parents and children interacting together (such as "Mommy and Me" classes) demonstrated statistically significant increases on their reported likelihood of playing, reading, or singing with their child in the next week. This suggests that actively involving parents in interactive activities (and providing good models and coaching for such interactions) may have a greater impact than other activities on increasing the likelihood of parents engaging in such activities on their own at home.
- We did not find significant changes with regard to parents' reported use of regular routines or discipline strategies; these areas of focus may benefit from increased attention on the part of programs. The consistent use of routines by parents (i.e., feeding, bedtime, etc) is associated with positive child outcomes (Fiese et al., 2002).
- Parents' participation in SR program activities including parent classes, parent-child activities, and home visits, appears to contribute to parents' perceived comfort with the school environment and their teachers, along with their sense of agency to intervene on behalf of their child when they have a concern. Parents who participated more in SR program activities between Time 1 and Time 2 showed significantly greater growth compared to those who participated less. This foundation of familiarity and comfort with the school culture will likely be an asset to parents as they interact with K-12 school systems. Programs should continue to foster parents' feelings of comfort and self-advocacy within the school context. In particular, programs should examine how they might increase (or optimize) parent participation in program activities, as the intensity of their involvement appears to be related to stronger outcomes in this area.
- Programs appear to be helping parents to have realistic and appropriate expectations for what their child should know and be able to do by kindergarten entry. Parent surveys and focus groups suggest that parents who participate in SR activities including parent classes, parent-child activities, and home visits, are learning about appropriate expectations. This knowledge on the part of parents can help them to guide their children appropriately, which in turn, can

smooth the transition to kindergarten and alleviate potential anxiety for children and families. Programs should be encouraged to continue to provide parents with information and training in this area.

- We found positive changes on two measures of social support among parents in parenting classes and those participating in parent-child activities, suggesting that participation in these activities may help to increase social supports available to parents. This finding did not hold up for parents receiving home visits, suggesting that parents may be increasing their peer networks through participation in on-site program activities. Programs may wish to explore ways in which parents receiving home visits might also have access to social supports, such as by networking with other parents as well as by facilitating interactions with staff or other professionals whom they could go to for advice or information about the care of their child.

### **Child Outcomes**

- Pre-LAS scores (English language skills) for children attending School Readiness program activities including preschool programs, parent-child activities, and kindergarten transition programs were significantly higher, on average, than scores for a demographically similar population of children enrolled in State Preschool. In addition, mean scores for receptive language, as measured by the PPVT-III/TVIP (English and Spanish versions) were comparable to scores for similar populations of children enrolled in State Preschool and those participating in Early Head Start, although in all three cases, children scored below the age norms for these measures. The data from a single point in time – close to the end of their participation in SR programs – suggest that the programs may be helping children to keep pace with their counterparts in other state and federal programs, but due to the limitations of the SR study design, we cannot estimate how they would have performed had they not attended SR programs. Nonetheless, SR programs should continue to focus on and support children’s acquisition of English and receptive language.
- Statistically significant changes in parent reports of their children’s communication skills revealed that children were using increasingly sophisticated communication strategies at Time 2 compared to Time 1. In focus groups, parents echoed these findings, commenting on the growth in their child’s use of vocabulary and communication strategies as a result of their participation in SR programs.
- SR programs appear to be preparing children well – and on average, better than State Preschools – to know the names of numbers, letters, and colors. While this finding is encouraging, SR programs could be doing more to help children develop print concepts and basic story comprehension skills, where their performance was lower than that of demographically similar children participating in Early Head Start. Thus, programs may want to focus more heavily on developing early literacy skills that go beyond naming of numbers, letters, and colors.
- Results also suggest a significant correlation between the number of months spent in SR programs overall and children’s scores on the Applied Problems (mathematics) subtest, at least for Spanish speakers. Children who were assessed in English scored very close to the national norm on this measure, with more than 90 percent scoring above the “at risk” cutoff of 85 percent, with scores very comparable to demographically similar children in State Preschool

programs. Given these results, programs should continue to support children’s development of mathematics and problem-solving skills.

- Although direct measures of children’s social-emotional development are limited in this study (and in the field, in general), parent survey results revealed small but statistically significant increases between Time 1 and Time 2 on a scale of nine items related to social-emotional development. In focus groups, parents also reported important developments that they attributed to SR programs in children’s growing independence, confidence, and interpersonal skills, such as the ability to share with others and develop friendships. Clearly, parents reported being very satisfied with SR program activities; the overriding suggestion that many of them offered was to increase the frequency or length of SR classes. From their responses, it appears that many parents would be receptive to offers of supplemental hours or days of program services – a change that programs may wish to consider.

### **Next Steps and Recommendations for Future Evaluation Work**

We have examined the relationships between levels of parent participation in School Readiness program activities and changes in their reports of their own beliefs, their behaviors, and their child’s development. For the most part, parents who participated in more hours of service through the School Readiness programs between Time 1 and Time 2 surveys (which spanned approximately four months) do not seem to demonstrate greater growth at Time 2, as was hypothesized. However, given the relatively high Time 1 ratings on many of the survey items and thus relatively low (but often significant) levels of change observed between Time 1 and Time 2, it is not surprising that we did not see strong relationships between growth and intensity of participation for most items. In addition, although we attempted to exclude parents who were identified by program staff as having been long-time participants, a moderately large number of survey respondents at Time 1 had actually been involved in School Readiness programs for some time. One might expect these parents to have experienced some growth prior to the Time 1 survey. Some of the noteworthy relationships we did see between growth and intensity of participation were related to parents’ reported level of comfort with their child’s school and teacher and in parents’ ratings of the importance of playing with their child.

In comparison to demographically similar parents from other studies, we found that SR parents’ responses were generally similar to parents who participated in the Family Literacy Initiative, Early Head Start, or the Atlanta Born Learning Campaign.

Although the parent survey analysis has yielded some useful findings, future evaluation efforts could be improved in a number of ways. First, the very short timeframe for this study posed significant challenges for data collection. Study design, gathering of basic background information, instrument development, and parent recruitment all had to occur within a period of two months. The short timeframe also impacted our ability to survey parents at the true beginning of their participation and follow up with them at a later point in time to allow more opportunity for growth. Observed growth may also have been greater had we been able to track parents’ attendance in SR programs from the point of their initial entry into the programs, and well-documented data on any prior program experience would have enabled more fine-grained analyses based on individual-level intervention dosages. More time for study design and implementation would be required for these improvements.

A second recommendation for future evaluation efforts is to integrate a program quality assessment component into the study. Given timeline and resource limitations, we did not collect data on the quality and characteristics of program activities, such as the focus and goals of the activities, the curriculum used, and the quality of teacher-child interactions. The addition of this information would strengthen models of growth over time.

Third, future evaluation efforts might incorporate grantee data collection efforts to a greater degree. Grantee program staff could administer a common parent survey, for example, to all parents upon entry and again at the end of the activity. This would yield cleaner “pre/post” results and would enable the inclusion of all parent participants. In addition, as noted earlier, if programs could document additional information about parents’ hours of involvement in various program activities over time, a clearer picture of parents’ history and total level of service received could be captured and incorporated in analyses.

Finally, further evaluation efforts might include data on the costs of carrying out various intervention approaches. This would facilitate an analysis of the most cost-effective strategies for improving school readiness outcomes. For example, as suggested by the First 5 LA Commission, one might consider calculating for each service type cost per child or cost per family – a measure that could be calculated for other Initiatives as well to enable cross-Initiative comparisons.

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