

# Sixpence Early Learning Fund

2015-2016 Evaluation Report  
September 2016



Collaborate. Evaluate. Improve.  
Interdisciplinary Center for Program Evaluation

Sixpence



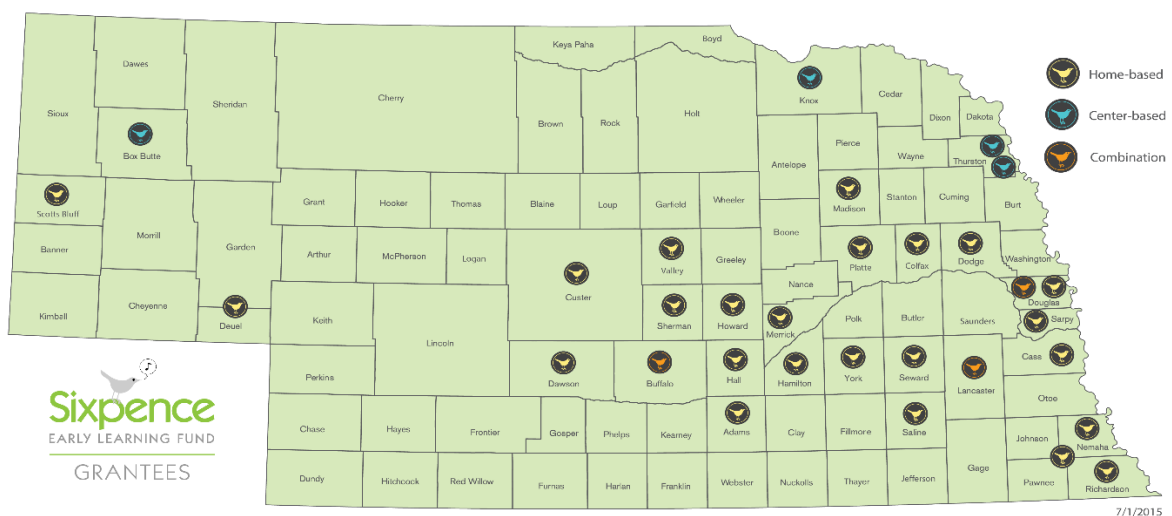
# PROGRAM DESCRIPTION

## What is Sixpence?

The Sixpence Early Learning Fund is a public-private partnership that funds grants to school districts to provide programs and services for infants and toddlers who are most at risk. The purpose of the Sixpence Programs is to help promote children's opportunities to experience positive environments that provide for their healthy growth and development during their earliest years. The Sixpence Programs promote community level partnerships that focus on meeting the developmental needs of very young children and support parents as their child's first and most important teacher, helping to ensure their child's success in school and later in life.

In the 2015-2016 program year, the Sixpence Early Learning Fund supported 31 school district grantees across the state. Programs were funded through a combination of sources, including Sixpence, federal, state and local funds. This was Sixpence's eighth year of serving young children in Nebraska. The majority (68%) of Sixpence Programs were in rural communities.

Each Sixpence program adopted one of three models: family engagement home-based services, center-based infant/toddler care, or a combination of the two. Most of the children (70%) participated in family engagement home-based services. These included year-round weekly individualized sessions in the family's home and in community locations, as well as group socializations, where families gathered to play, learn and build community. Fewer children (30%) participated in the center-based programs most of which provided full-day, year-round services. All of the center-based programs used strategies to engage parents in their child's education program and conducted home-visits with the family.



# CHILD AND FAMILY DEMOGRAPHICS

## Who were the children and families served?

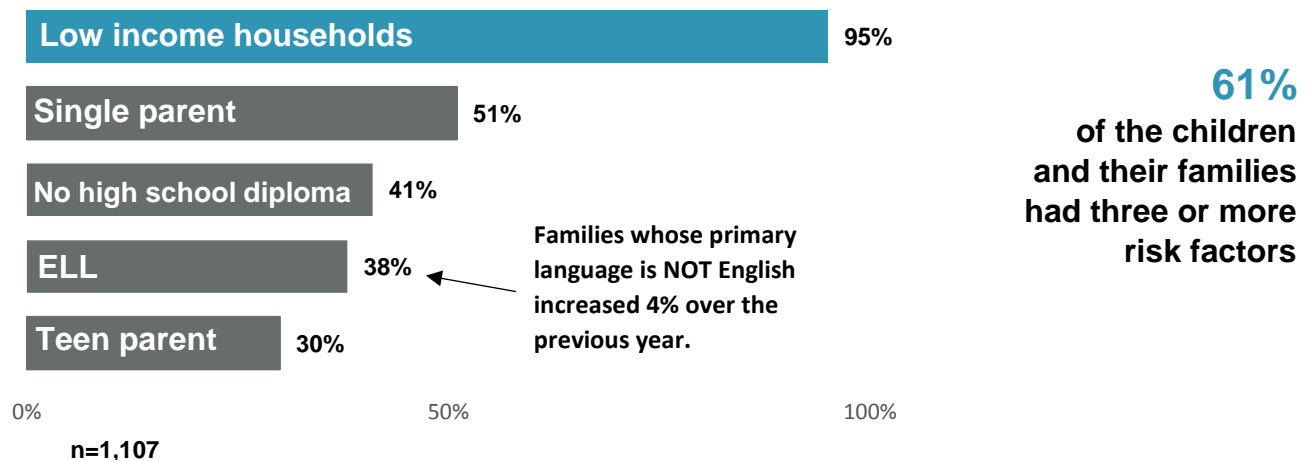
In 2015-2016, Sixpence served 1,107 children and 961 families across 31 grantees. This year, 117 mothers enrolled in Sixpence during their pregnancy and 89 of them gave birth prior to June 30, 2016.

Sixpence Programs serve infants and toddlers (birth to age three) who are most at risk of failure in school. The children served must have at least one of the five qualifying risk factors:

- ▶ Poverty, as defined by Federal guidelines for free or reduced lunch
- ▶ Born prematurely, with typical or low birth-weight
- ▶ English is not the primary language spoken in the home (ELL, English Language Learner)
- ▶ Parents who are younger than 20
- ▶ Parents who have not completed high school

Parents who fall into one of the qualifying risk categories can be served during the mother's pregnancy. Six additional risk factors were tracked: single parents, incarcerated parents, parent's absence due to death or military deployment, foster care or CPS involvement, child witnessing violence in home or community, and family mental health issues. The graph below shows the most common risk factors Sixpence families experience.

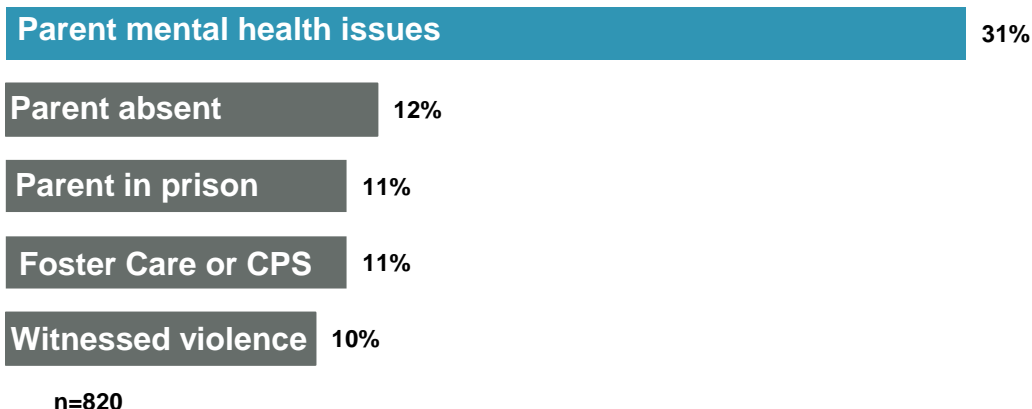
### Low income was the leading risk factor for Sixpence families.



Of the five qualifying risk factors to participate in Sixpence, premature birth or low birth weight was the least common, with 12% of the children meeting this criteria. Most (61%) of the children served in Sixpence had three or more risk factors.

Additional risk factors relating to child trauma were collected in the spring. Trauma plays a role in the lives of 41% of the children in Sixpence. Twenty percent of the children experienced multiple traumatic situations.

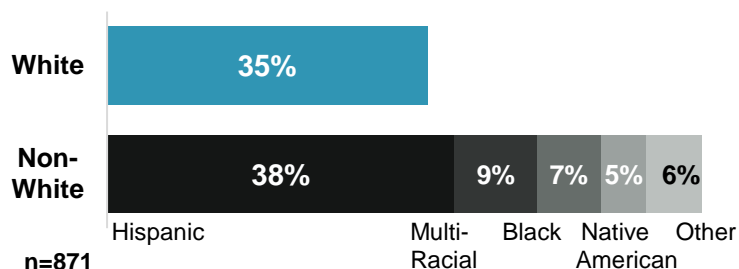
**The most common trauma for Sixpence children was having a parent with mental health issues including drug or alcohol abuse.**



#### Child Demographics:

Sixpence served slightly more males (53%) than females (47%). A total of 11% of the children qualified for special education services and were receiving these services through Nebraska's Early Development Network. The majority of the children (65%) were under the age of one at the time of entry into Sixpence.

**Most of the children served were minorities.**



### What was the retention rate of families in the program?

**The Sixpence retention rate was 83%**

Sixpence has a strong record of retaining families in the program. In 2015-2016, 83% of the families stayed in the program through June 30, 2016, or until their child aged out of the program. Of the 188 children who left the program prematurely, most (71%) withdrew in their first year of service. This indicates that if families stay for one complete year of services they are highly likely to stay in Sixpence until their child ages out.

The most common reasons families exited Sixpence early were poor attendance (30%), a family move (28%), and family issues that made it difficult to participate (26%).



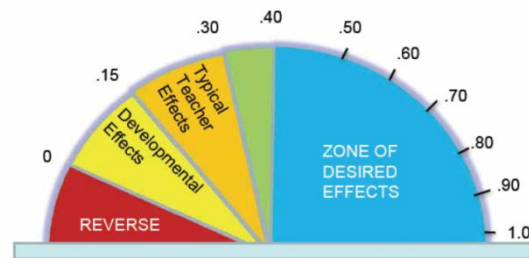
## EVALUATION FINDINGS

A comprehensive evaluation process was conducted to monitor the implementation of the Sixpence programs and assess progress towards identified program outcomes. Information was collected and reported uniformly across programs. Data was shared with programs throughout the year to support program improvement.

The findings are reported in four areas: Program Quality Outcomes, Child Outcomes, Health Outcomes and Family Outcomes. For each outcome, we report the percentage meeting the Sixpence program goal. When there is fall and spring data, we present change over time. We also analyze the data in order to determine the relationship of four factors: family language, family risk factors, length of time in Sixpence, and type of program, on child and family outcomes.

### Program Impacts

To quantify program impacts, we report all pre and post measures relative to significance (were the results statistically significant) and if so, what was the magnitude of the change (effect size). Effect sizes are either reported as a Cohen's  $d$  or  $\eta^2$ . To understand effect size and to place it in context, Cohen (1988) suggests the values of  $d=0.20$  to be small,  $d=0.50$  to be medium, and  $d=0.80$  to be a large effect. More recently, Hattie (2009) uses a concept called "zone of desired effects" that starts at a medium effect size, 0.40. Effect sizes can be greater than 1.0; however, they are less common and are therefore not shown on the graphic. Effect sizes tend to be smaller with very young children, so some recommend that the zone of desired effects to begin at around .20. With younger students (infant through kindergarten), lower value effect sizes are recommended because the range of measurement error is larger with very young children (Burchinal, 2008). For this report, a value of 0.20 will be considered in the zone of desired results since we are assessing young children. Interpreting effect sizes using a  $\eta^2$  is different than Cohen's  $d$ . The guideline for effect size with One Way ANOVA is  $\eta^2$ : small=0.010, medium=0.059, and large=0.138 (Cohen, 1988).



Zone of Desired Effects (Hattie 2009)



**"I've gained so much knowledge to assist me in raising my daughter in an environment that's going to nurture her and provide her with every possible opportunity to be her best."**

**A parent reflects on Sixpence**

## PROGRAM QUALITY OUTCOMES

### What was the quality of center-based services?

Two tools were chosen to evaluate the quality of Sixpence classrooms, the Classroom Assessment Scoring System (CLASS) and the Infant/Toddler Environment Rating Scales-Revised (ITERS-R). The CLASS “is a rating tool that provides a common lens and language focused on what matters—the classroom interactions that boost student learning” (LaParo, Hamre, & Pianta, 2012). The ITERS-R assesses classroom quality, with a focus on classroom structure, activities, and play materials. New teachers were assessed using the ITERS-R while teachers who had been a part of the Sixpence program previously, and already met quality benchmarks on the ITERS-R in prior years, were assessed using the CLASS. The CLASS was used to assess a random sampling of half of the classrooms previously meeting program criteria (or a minimum of two classrooms for smaller programs).

#### Classroom Assessment Scoring System (CLASS) Results

CLASS scoring was based on a two-hour videotape of classroom interactions. Both the Infant and Toddler CLASS rate teacher-child relationships based on social-emotional supports. The Toddler CLASS has an additional domain, Engaged Support for Learning, to measure how teachers engage the children in discovery, promote critical thinking, and provide rich language experiences. Scoring is based on a 7 point scale with 7 indicating highest quality. The CLASS results for 17 classrooms are presented below.

**Sixpence center-based teachers consistently created emotionally supportive and caring environments in their classrooms.**  
Engaged Support for Learning was of moderate quality.



Sixpence classrooms demonstrated high quality in the area of teacher-child relationships. The teachers were consistently warm, responsive, flexible, and supportive towards children with 94% of the classrooms meeting the program quality benchmark of 5. This is an increase over the previous year when 85% of classrooms met the benchmark. Sixpence classrooms created an environment of mutual respect between teachers and children and in peer to peer interactions.

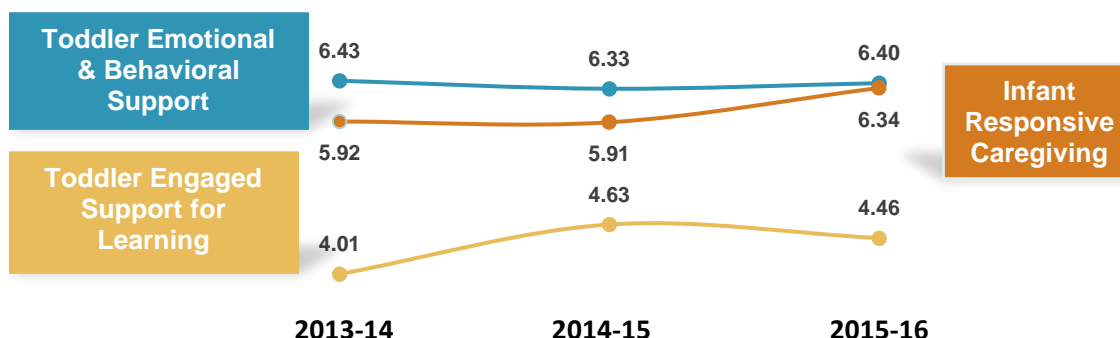
**In the area of social-emotional support, 94% of the classrooms met the quality benchmark**

Engaged support for learning was in the moderate range. In this domain, most (67%) of the classrooms scored above a 5.

**Over time, toddler classrooms have remained in the high quality range for Emotional & Behavioral Support.**

**Infant classrooms have improved. Responsive Caregiving was in the high quality range.**

**Toddler Engaged Support for Learning remained in the moderate quality range.**



Over time, average Toddler CLASS Emotional and Behavioral Supports scores remain in the high quality level. Engaged Support for Learning scores decreased slightly from the previous year; however, average scores for the past two years trended closer towards the benchmark than the average score for the 2013-2014 year. Average scores remained in the moderate range. Mid-range scores indicate teachers were not consistently observed using top tier strategies such as facilitating development by ensuring active engagement, providing assistance to help children gain new understanding, and connecting familiar words to new vocabulary. The Infant CLASS averages increased from last year to this year.

Over the past three years, there have been slight changes in CLASS scores, both negative and positive. However, the sample is too small to run any statistical analyses to determine if these changes are significant.

### Infant/Toddler Ratings Scales-revised (ITERS-R) Results

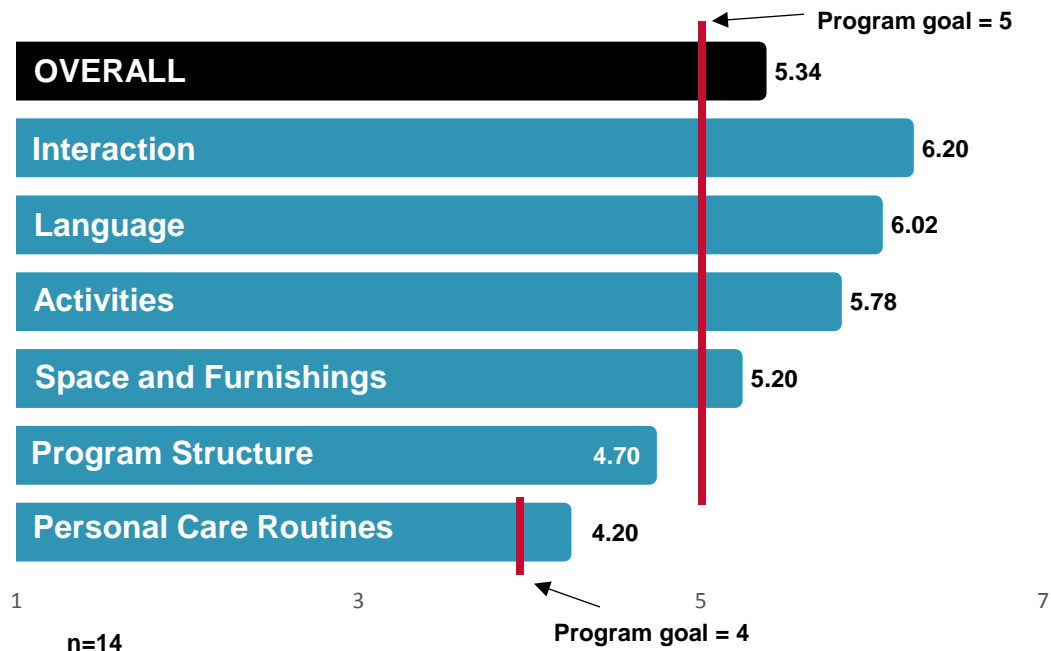
The ITERS-R was used in programs that were new to Sixpence, in classrooms with a new teacher or a new setting, or in classrooms that had not met the quality indicators in the previous year. The ITERS-R is based on a three-hour, in-person observation. Scoring is based on a 7-point scale with 7 indicating highest quality. This year, a re-anchoring process was implemented for the ITERS-R across Nebraska. A portion of the Sixpence classrooms (50%) were assessed using the newly implemented scoring guidelines. As a result of this process, the rigor of scoring criteria increased across multiple domains, with particular increased expectations in the program structure domain. With the implementation of more stringent criteria, it would be expected that scores would be lower during the first year as programs work to align with the newly held expectations of the tool.

The following graph shows ITERS-R subscale and overall averages for 14 classrooms.



**In 2015-16, most Sixpence classrooms met or exceeded the Sixpence program goal in the majority of subscales.**

Program structure is an area for future improvement.



On average, Sixpence classrooms continued to rate highly on the ITERS-R and consistently met program quality benchmarks in almost every subscale, with Program Structure being the one exception.

The majority (64%) of classrooms met the program benchmark for the ITERS-R in the Overall score. The majority of classrooms demonstrated high-quality practices in the areas of Language (86%), Activities (86%), Interaction (79%), and Space and Furnishings (57%). High-quality ratings in these areas indicate many teachers engaged children in interactions to foster understanding and use of language, interacted with children in a responsive manner, encouraged peer to peer interactions, and provided adequate space and furnishings for daily routines and activities. The majority (57%) of programs met the Personal Care Routines quality benchmark of a 4. High-quality practices in this area indicate classrooms utilized hygienic, healthful and safe practices during daily routines such as mealtime, naptime, and diapering/toileting. Fewer programs (36%) demonstrated quality practices in the area of Program Structure, which assesses the daily schedule, the amount of time children engage in both free play and group activities, and provisions for children with disabilities during classroom activities.



Given the implementation of revised ITERS-R scoring guidelines this year, comparisons of quality indicators across program years is not feasible.

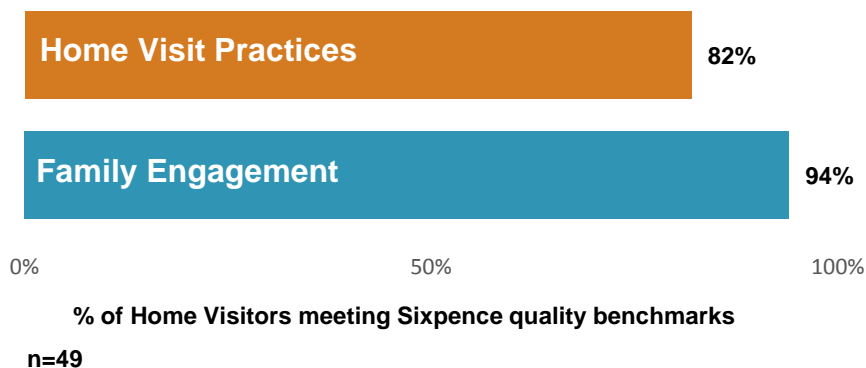
## What was the quality of family engagement services?

The *Home Visit Rating Scales-Adaptive and Extended* (HOVRS-A+ v.2.1) assesses the quality of family engagement sessions based on a video of a home visit. It is scored on a 7 point scale, with 7 indicating high quality. The HOVRS-A+ v.2.1 results are reported in two domains. The first, Home Visit Practices, measures the home visitor's responsiveness to the family and how the visitor facilitates parent-child interaction, builds relationships with the family, and uses non-intrusive approaches. The second domain, Family Engagement, measures parent-child interaction and the level of parent and child engagement within the activities of the home visit.

In 2015-2016, 49 home visitors were assessed, and of these home visitors, 21 were new to the program. There were five home visitors who were not assessed as they previously demonstrated high quality home visit practices (a score of 6.0 or higher) for two consecutive years. The results of the HOVRS-A+ v.2.1 indicated the majority (82%) of home visitors met the quality benchmark (a score of 5.0 or higher) signifying incorporation of best practices during their sessions. The quality of home visit practices was high even with a significant number (43%) of new home visitors and the exclusion of a subset of veteran home visitors (9%) who previously demonstrated high quality home visit practices.

**Most home visitors consistently used best practices to support families.**

**Nearly all families were engaged during home visits.**

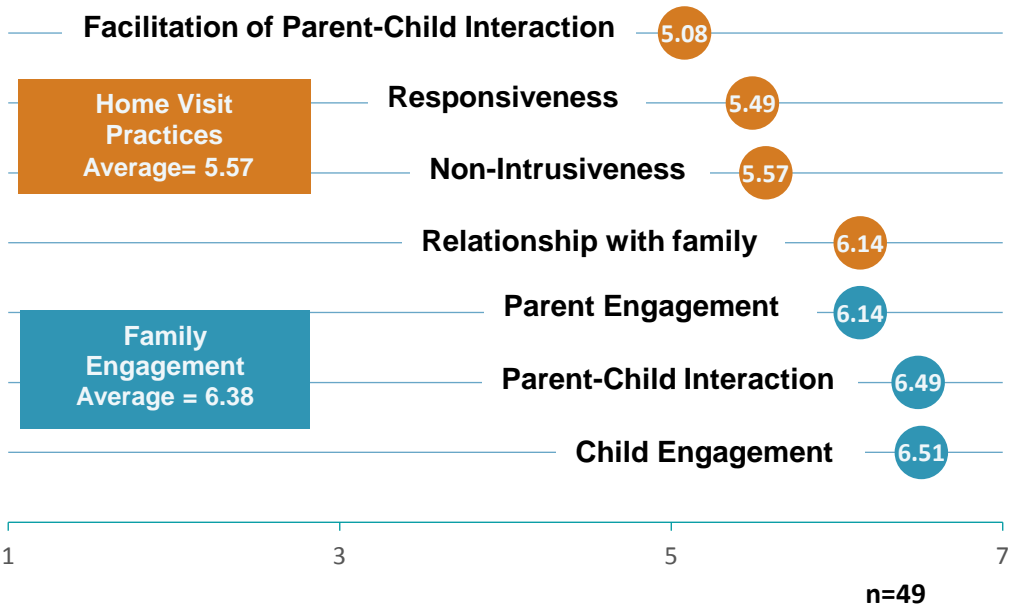


As shown in the following chart, the average scores in 2015-2016 for the Home Visit Practices and Family Engagement domains exceeded the program quality benchmark of 5.0. The Home Visit Practice score was 5.57 and the Family Engagement score was 6.38.

In the Home Visit Practices domain, all subscales on average met the quality benchmark. Home visitors showed the greatest strength in building relationships with families. A high rating on this scale indicates the home visitor and family are frequently engaged in warm, positive behaviors during the home visit.

In the Family Engagement domain, all subscales on average met the quality benchmark. The greatest strength was in the area of Child Engagement. A high rating on this scale indicates that the child frequently displayed behaviors that indicate engagement and interest in the home visit.

**Home Visitors built strong relationships with their families.**  
Families were highly engaged during home visits.



“I like that we get to do a lot of activities and my baby is happy. I like the relationship my daughter has built with my home visitor. She gets very excited when she knows she's coming.”

A parent reflects on Sixpence



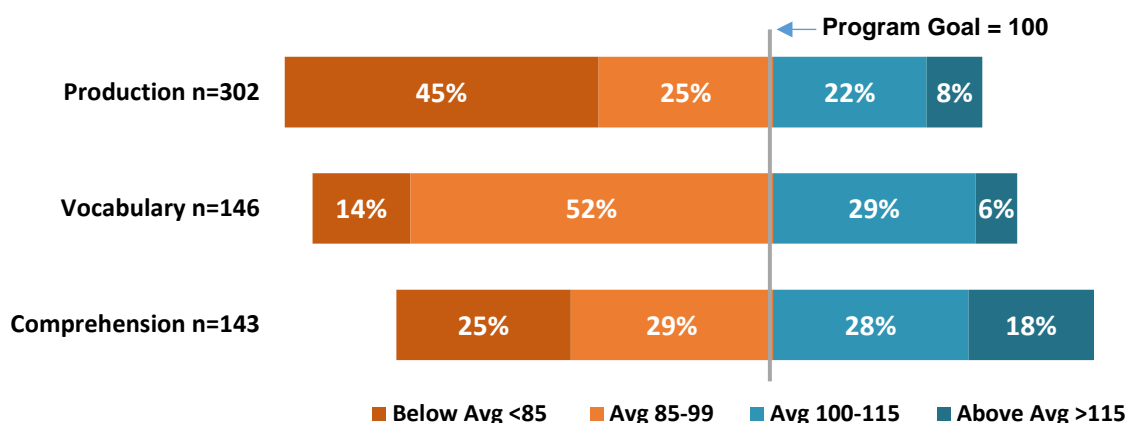
## CHILD OUTCOMES

### What were the children's language outcomes?

Two standardized assessments were administered to monitor the children's language outcomes. The McArthur-Bates Communicative Development Inventories (CDI), a parent report assessment measuring language production and comprehension, is given to children ages 8 to 30 months. The Peabody Picture Vocabulary Test-IV (PPVT-IV), a direct child assessment measuring vocabulary, is administered to children at age 3. The Sixpence program goal is a standard score of 100, the midpoint of the average range. The chart below indicates the language outcomes for the children. Blue shades indicate the percent of children meeting the goal. Orange shades indicate the percent of children who did not meet the goal.

**Nearly half of the children met the program goal for comprehension.**

**Fewer children met the goal for production and vocabulary.**



Comprehension was the strongest language skill with 46% of the children meeting the goal. Far fewer children met the goal in vocabulary (35%) and production (30%). It is interesting to note that nearly half (45%) of the children scored below average for production and a quarter scored below average in comprehension. Given that only 11% of Sixpence children have qualified for Early Development Network services, there is no clear explanation as to why a disproportionate percentage of children scored in the below average range. These results are similar to child language outcomes in 2014 and 2015.

### Comparison: Change over time

Paired-samples t-test analyses were completed to measure change over time for comprehension and production outcomes. There was a significant decline in comprehension scores (presented as a percentile rank) over time, but no significant change in production scores. The vocabulary assessment was only administered one time at age 3 so it was not possible to measure change over time.

Comprehension: Fall (M=51.10, SD=30.19)/ Spring (M=40.66, SD=33.82),  $p=.05$ ,  $d=.26$ . The effect size was small.

## **Risk Factors made a difference**

**Children with multiple  
risk factors had significantly  
lower vocabulary scores**

### **Comparisons: Low and High Risk**

A one-way between subjects ANOVA was conducted to compare the language outcomes of children at low and high risk. Children with three or more risk factors scored significantly lower on the vocabulary assessment [ $F(1,144)=4.333$ ,  $p=.039$ ] than those with fewer risk factors. The effect size was small ( $\eta^2=0.029$ ). Risk factors did not result in significant differences in the areas of comprehension or language production.

## **Family Language made a difference**

**ELL children  
had significantly lower  
vocabulary scores**

### **Comparisons: ELL and English speakers**

A one-way between subjects ANOVA was conducted to compare the language outcomes of the ELL children to their non-ELL peers. ELL children scored significantly lower on the vocabulary assessment [ $F(1,147)=10.498$ ,  $p=.001$ ] than native English speakers. The effect size was medium ( $\eta^2=0.067$ ). Family home language did not result in significant differences in the areas of comprehension or language production, but this assessment was offered in Spanish. 38% of Sixpence families were ELL.

## **The time in Sixpence made a difference**

**Children enrolled in Sixpence  
for more than a year had  
significantly lower  
comprehension scores**

### **Comparisons: Less than a year and More than a year in Sixpence**

A one-way between subjects ANOVA was conducted to compare the language outcomes of children who had less than a year of participation in Sixpence to those with more than a year of participation. Children with one or more year in Sixpence scored significantly lower on the comprehension assessment [ $F(1,144)=7.544$ ,  $p=.007$ ] than children with less than a year in the program. The effect size was medium ( $\eta^2=0.051$ ). Time in program did not result in significant differences in the areas of vocabulary or language production.

**The type of program, home visiting or center-based, did not make a significant difference in language outcomes.**



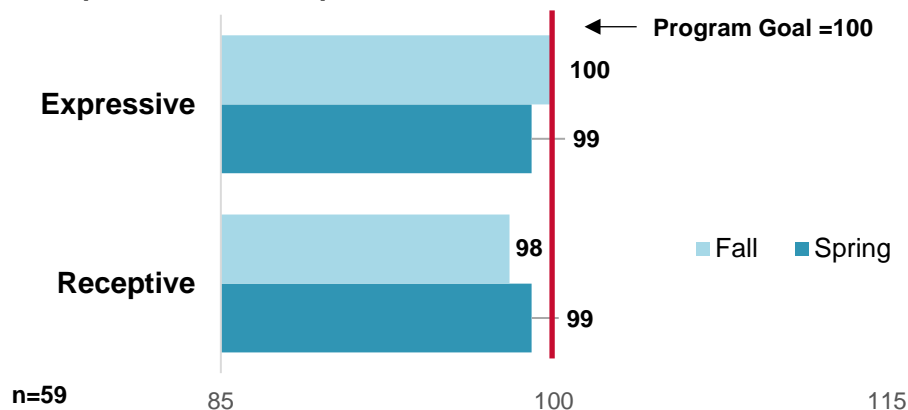
## Language Assessment Pilot

Over the past few years, the results on the MacArthur CDI have raised questions about the assessment because large percentages of children have been scoring more than one standard deviation below the mean. These results exceed expectations even for the high risk population that Sixpence serves. The evaluation team decided to pilot a new tool, the DAYC-2 (2013), and compare the outcomes to the MacArthur CDI.

The DAYC-2 evaluates both expressive and receptive skills in children, which made it ideal for a comparison to the MacArthur production and comprehension scales. It was piloted in four communities: Broken Bow, Crete, Fremont and Loup City. A total of 59 children were assessed both in the fall and the spring. Results of a paired-samples t-test analysis found that there were no significant differences between fall and spring scores on either the expressive or receptive language scales.

### Sixpence children evaluated with the DAYC-2 had language skills that were stable over time.

Children's expressive and receptive skills were at similar levels.



Of interest was how the results of this assessment compared to the MacArthur production and comprehension scores. There were only 33 matched assessments so results need to be interpreted with caution. The results of the correlation suggest that there was a moderate ( $r^2=.67$ ) correlation between the two assessments. Descriptively the primary area where there were differences was in expressive language. In this area higher percentages of children were below average (1.5 standard deviation or more) on the MacArthur (40%) than on the DAYC-2 (12%). Given that the majority of the children in Sixpence were not eligible for early intervention services, it is suggested that the results of the DAYC-2 expressive language may be a better measure of the children's skills than the scores on the MacArthur production scale.

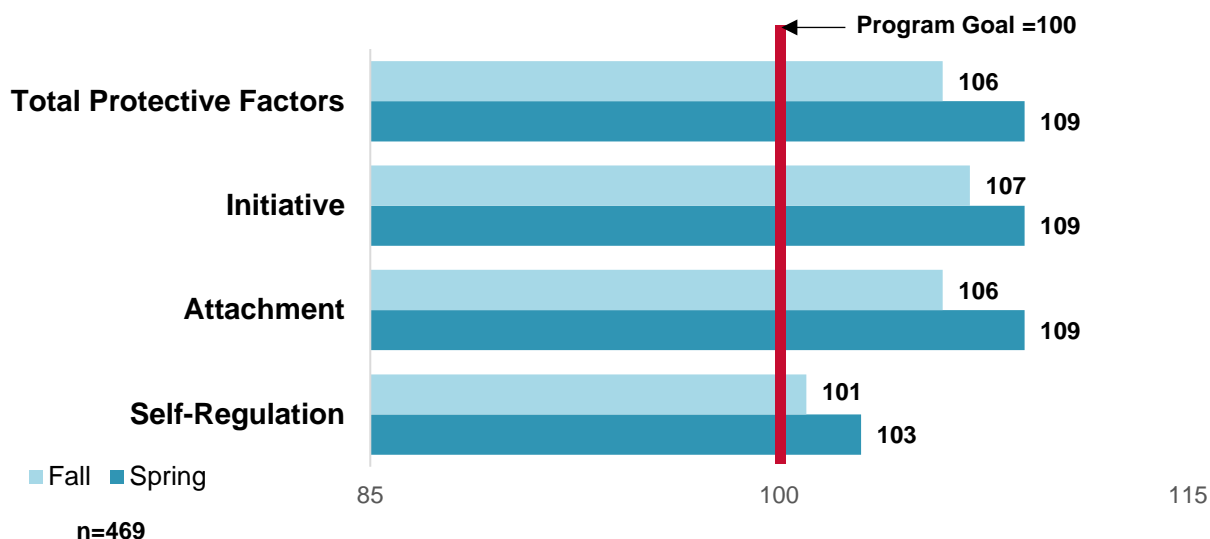
For the 2016-2017 program year, the evaluation will switch to the DAYC-2 as the language outcome measure for children 8 months and older whose primary language is English. The MacArthur, Spanish version, will be used with children whose home language is Spanish, because the DAYC-2 is only available in English.

**Just over half (51%)  
of the children met the  
program goal in  
receptive skills and  
almost half (47%)  
met the goal in  
expressive skills  
by spring**

## What were the social-emotional outcomes of the children?

In the fall and spring, parents or classroom teachers completed the Devereux Early Childhood Assessment (DECA), a standardized social-emotional assessment that measures children's protective factors in the areas of Initiative, Attachment, and Self-Regulation. A total of 469 children had fall and spring assessments.

**Sixpence children were on target for social-emotional competencies.**  
Children showed significant improvement from fall to spring in all areas. The Sixpence averages for each scale were 1 to 9 points above national averages.



On average, Sixpence children scored above the national mean for social-emotional competencies.

### Comparison: Change over time

Paired-samples t-test analyses were completed to measure change in standard scores over time. Children made significant improvements in the three subscales and in Total Protective Factors:

Initiative: Fall (M=107; SD=10.14)/Spring (M=109; SD=10.20),  $t=-2.199$ ,  $p=.028$ ,  $d=0.10$ ;

Attachment: Fall (M=106; SD=9.68)/Spring (M=109; SD=9.45),  $t=-4.419$ ,  $p<.001$ ,  $d=0.20$ ;

Self-Regulation: Fall (M=101; SD=10.26)/Spring (M=103; SD=10.42),  $t=-2.45$ ,  $p=.007$ ,  $d=0.16$ ;

Total Protective: Factors: Fall (M=106; SD=10.13)/Spring (M=109; SD=9.80),  $t=-3.05$ ,  $p=.002$ ,  $d=0.14$ .

The result for Attachment represents a small effect size that falls within the zone of desired effects. The effect sizes for the other constructs fell below the zone of desired effects indicating the magnitude of the change was minimal.

**By spring  
76%  
of the children  
met the program goal  
for social-emotional  
competencies**

## Type of program made a difference

**Children in family engagement programs had higher social-emotional outcomes than children in center-based programs**

### Comparison: Family engagement and Center-based programs

A one-way between subjects ANOVA was conducted to compare the social-emotional outcomes of children enrolled in the two types of Sixpence programs. Children in family engagement settings scored significantly higher in Total Protective Factors [ $F(1,504)=19.179$ ,  $p<.001$ ] than those served in center-based programs. The effect size was small ( $\eta^2=0.044$ ). Again, both groups met the program goal and had average scores above the national mean.

**Neither the number of risk factors, family language, nor the length of time in Sixpence made a difference in social-emotional outcomes.**

**“I like that the teacher comes to your home. That makes it so much easier on me since it's very convenient. My son loves when his teacher comes with new games and activities.”**

**A parent reflects on Sixpence**

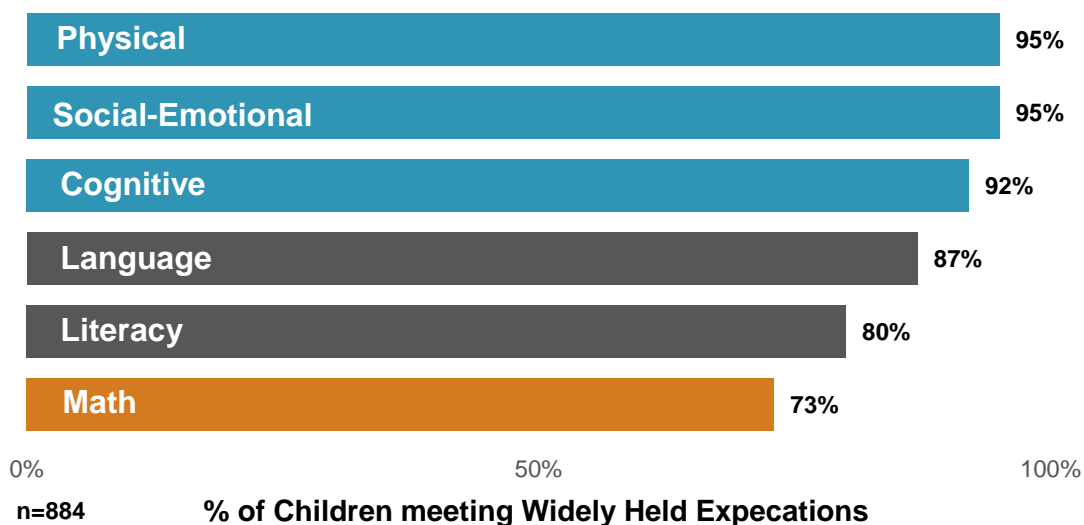


## What were the developmental outcomes for the children?

Teaching Strategies (TS) GOLD, an authentic developmental assessment, was adopted by the Nebraska Department of Education to assess all children receiving services in school district funded programs. The child outcome areas in this assessment include: cognitive, language, fine motor, social-emotional, literacy, and math. TS GOLD established widely held expectations for each age group. These expectations include the skills that children at a given age group would obtain based on research in the field. Assessments were completed on an ongoing basis. For this report, spring checkpoint data were analyzed to monitor children's progress towards achieving widely-held expectations as well as monitoring growth across these outcome areas. Data for this report was collected for all children (i.e., typically developing and those with IEPs and IFSPs). A total of 884 children had assessment data collected in the spring.

### By spring, high percentages of children were meeting widely held expectations across developmental areas.

Lower percentages of children were meeting expectations in math and literacy.



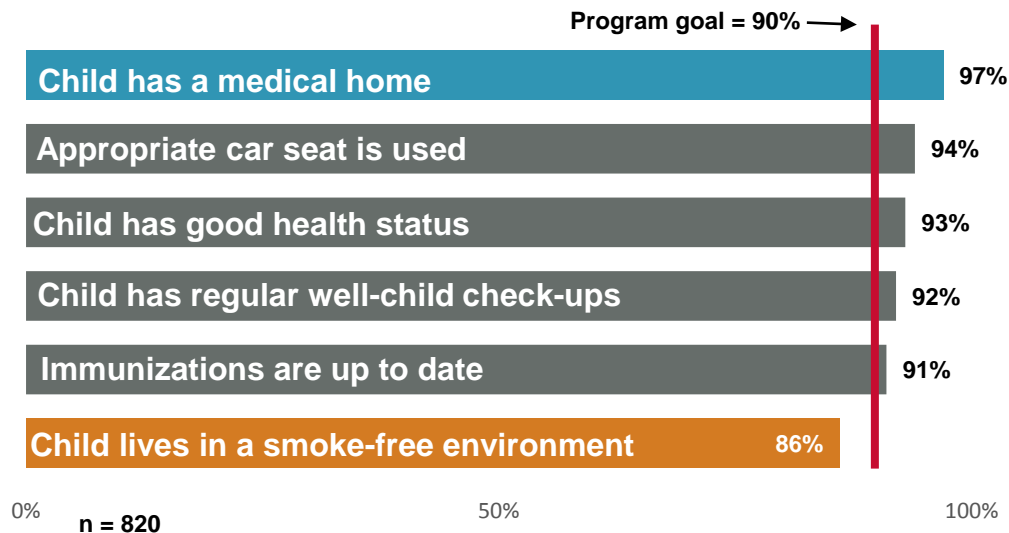
The majority of the children were meeting widely-held expectations across all developmental areas. Strengths were in the areas of cognitive and physical development with fewer children achieving expectations in math and literacy.

## HEALTH OUTCOMES

### What were the health outcomes of the children?

**Nearly all of the children met every Sixpence health indicator.**

Sixpence immunization rates were 12 percentage points above the state rate of 79%.



In the spring, health and risk factor updates were collected for 820 families. Results indicate that in nearly every category, Sixpence families made healthy choices for their children. Nearly every family had a consistent medical provider who they saw for regular checkups and immunizations, as opposed to using the emergency room for routine health needs. While most of the children were in good health, 7% had a chronic medical condition such as asthma. The only health indicator where Sixpence fell short was in child exposure to smoke. Programs may want to consider ways to promote smoking cessation classes for families who qualify.



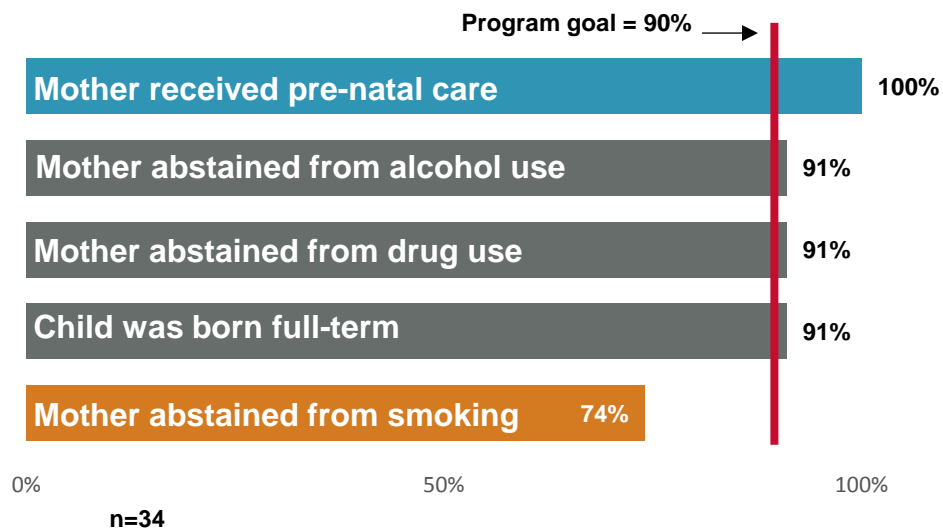
**“The program has helped me become more informed about my child’s development - intellectually and physically.”**

**A parent reflects on Sixpence**



## What were the health outcomes for the pregnant mothers and newborn babies?

**Nearly all of the pregnant mothers received consistent prenatal care.**  
Most mothers avoided risky behavior but 26% smoked during their pregnancy.



Of the 117 children whose mothers received Sixpence prenatal services, 89 were born in the 2015-2016 program year. A prenatal health survey was collected for 34 of these mothers.

Results indicate that Sixpence mothers engaged in a number of healthy practices to promote the health of their infant. All Sixpence mothers received consistent pre-natal care. Most (91%) of the mothers abstained from risky behaviors while pregnant. Most (91%) of the babies were born full-term with healthy birth weights. An area of prenatal health that falls well below the program goal is the rate of mothers (74%) who smoke while pregnant. Smoking cessation support for pregnant women in Sixpence could be a focus for services in the coming year.

Most (82%) new mothers served by Sixpence initiated breast feeding, which is the same rate as Nebraska mothers (Center for Disease Control and Prevention, 2014). At the spring family survey, 12 mothers reported that they were still breast feeding their babies who ranged in age from 1 to 15 months. For mothers who had finished nursing, very few (6%) reported nursing their babies for at least six months. This is much lower than the Nebraska rate, where 46% of the mothers breast feed their babies for six months (CDC, 2014).

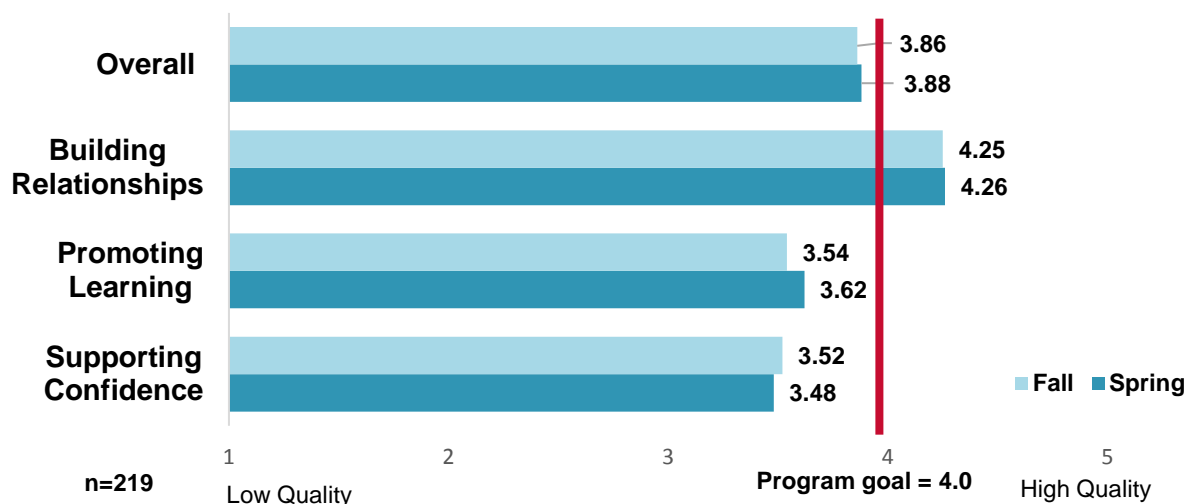
**82%**  
**of the mothers initiated**  
**breast feeding**  
**but most weaned their**  
**babies before**  
**six months of age**

## FAMILY OUTCOMES

### How did Sixpence impact parenting practices?

The Keys to Interactive Parenting Scale (KIPS) measures parenting behaviors across three areas: Building Relationships, Promoting Learning and Supporting Confidence, based on a videotape of a parent playing with his or her child. Scores are based on a 5 point scale with 5 being high quality. A total of 219 families had fall-spring KIPS.

**Sixpence families demonstrated consistent parent-child interactions across time. Their greatest strength was in building relationships with their children through play.**



Sixpence families demonstrated strong skills in building relationships with their children. Average scores exceeded the program goal in this area. Overall average KIPS scores approached the program goal of a 4.0. Parents demonstrated more moderate skills in the other subscales, but average scores were still in the upper range of “good” quality.

By spring, nearly half (49%) of the parents met the program goal for Overall high-quality parent child interactions. A strong majority (72%) met the goal in Building Relationships. Fewer parents meet the goal in Promoting Learning (43%). About a third (33%) of the parents met the goal in Supporting Confidence.

Paired-samples t-test analyses were completed to measure change over time. Changes from fall to spring were not found to be statistically significant. Parents demonstrated consistent skills across time.

**By spring,  
72%  
of parents  
were highly skilled in  
building relationships  
with their child**

Results found that additional factors influenced parent-child interaction, including the language status of the family, risk status of the family and time in program.

## Family language made a difference

**Parents whose primary language was English had significantly higher parent-child interaction scores**

### Comparison: ELL and English speakers

A one-way between subjects ANOVA was conducted to compare the parent-interaction outcomes of ELL parents and their non-ELL peers. Parents whose primary language was English scored significantly higher than ELL parents [ $F(1, 249)=11.257$ ,  $p=.001$ ] on parent-child interaction scores. The effect size was small ( $\eta^2=0.043$ ).

## Risk factors made a difference

**Parents with higher risk had significantly lower parent-child interaction scores**

### Comparison: Low and High risk

A one-way between subjects ANOVA was conducted to compare the parent-interaction outcomes of parents at high and low risk. Parents with three or more risk factors scored significantly lower in the areas of Promoting Learning (PL) and Supporting Confidence (SC) than parents with fewer risk factors [PL:  $F(1,251)=4.153$ ,  $p=.043$ , SC:  $F(1,251)=7.549$ ,  $p=.006$ ]. The effect sizes were small (PL:  $\eta^2=.016$ , SC:  $\eta^2=.029$ ).

## Time in Sixpence made a difference

**Parents in Sixpence for more than a year had significantly higher parent-child interaction scores**

### Comparison: Less than a year and More than a year in Sixpence

A one-way between subjects ANOVA was conducted to compare the parent-interaction outcomes parents who had less than or greater than one year of participation in Sixpence. Parents with one or more year in Sixpence had significantly higher parent-child interaction scores than parents with less than one year [ $F(1,345)=12.659$ ,  $p<.001$ ]. The effect size was small ( $\eta^2=0.035$ ).

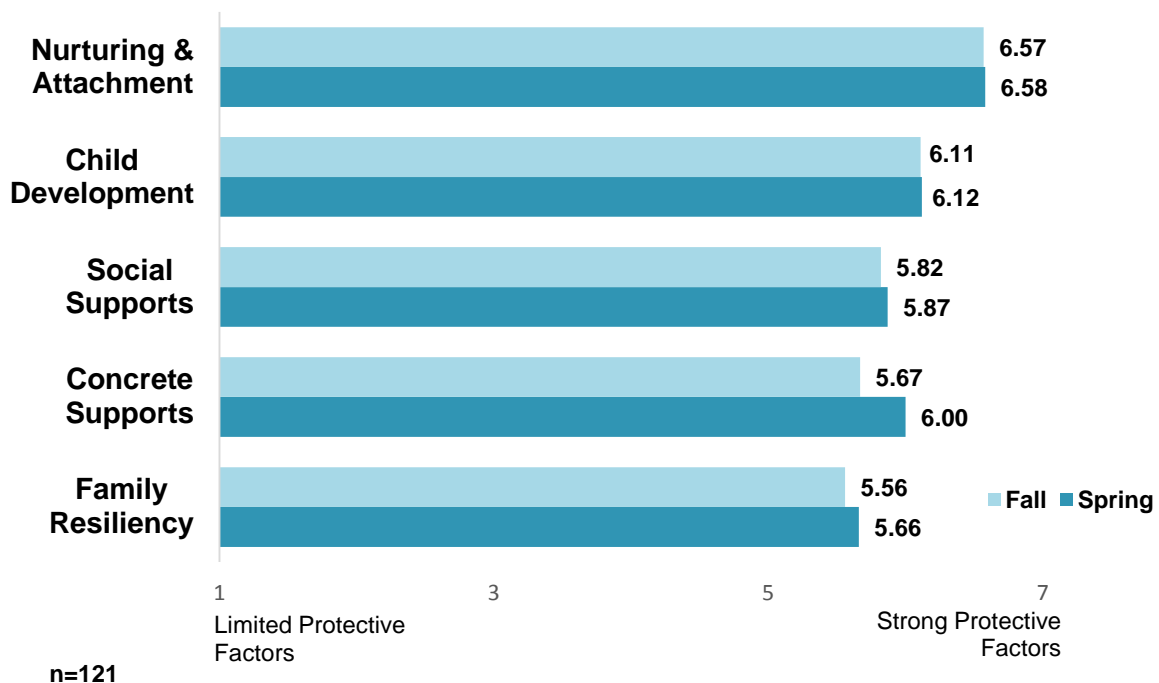
**75% of parents read to their children at least 3 times a week.  
35% read to their children every day.  
76% of families have more than 10 children's books in their home.**



## How did Sixpence impact parents' protective factors?

This year, only families new to Sixpence completed the FRIENDS Protective Factors Survey (PFS), a broad measure of family well-being. It was recommended the PFS only be used with new families because the tool authors have found that families make the greatest growth on this scale during the first months of the intervention and then gains plateau. The survey assesses five areas: Family Resiliency, Social Supports, Concrete Supports such as access to housing, child development knowledge, and Nurturing and Attachment. A total of 121 families completed the PFS in the fall and spring. The PFS is based on a 7 point scale with 7 indicating strong protective factors. No program goal has been set for the PFS.

**Sixpence families demonstrated strong protective factors across all areas, particularly in nurturing and attachment.**  
Protective factors remained stable over time.



The results indicate that Sixpence families have strong protective factors, approaching the top of the scale in nurturing and attachment and in knowledge of child development.

### Comparison: Change over time

Paired-sample t-tests were conducted to determine if there were significant changes over time. Results indicated that there was significant change from fall to spring in only one sub-scale. This is not surprising because the high scores in the fall meant there was limited opportunity for growth. Only the area of Concrete Supports showed significant increase over time.

Concrete Supports: Fall (M=5.67, SD=.1.584)/Spring (M=6.00, SD=.1.501),  $t=-2.041$ ,  $p=.04$ ,  $d=0.19$ . The effect size was small.

## Family language made a difference

**Concrete Supports and Nurturing and Attachment varied significantly based on family language**

### Comparison: ELL and English speakers.

A one-way between subjects ANOVA was conducted to compare the protective factors outcomes of ELL and non-ELL parents. Parents whose primary language was English scored significantly higher than ELL parents in the area of Concrete Supports [ $F(1, 114)=5.186, p=.03$ ]. The effect size was small ( $\eta^2=0.046$ ). In contrast, ELL parents scored significantly higher than English speakers in the area of Nurturing and Attachment [ $F=4.046, p=.05$ ]. The effect size was small ( $\eta^2=0.034$ ).

## Risk factors made a difference

**Families with multiple risk factors had significantly lower scores in Family Resiliency, Social Supports, and Concrete Supports**

### Comparison: Low and High risk

A one-way between subjects ANOVA was conducted to compare the protective factors outcomes for families with many risk factors to families with fewer risk factors. Increased risk factors resulted in poorer outcomes in the areas of:

**Family Resiliency** [ $F(1,122)=7.051, p=.009$ ]. The effect size was medium ( $\eta^2=0.055$ ).

**Social Supports** [ $F(1,122)=6.600, p=.011$ ]. The effect size was medium ( $\eta^2=0.051$ ).

**Concrete Supports** [ $F(1,121)=5.878, p=.017$ ]. The effect size was small ( $\eta^2=0.046$ ).

**The type of program did not make a difference in protective factors. Time in program was not analyzed because all families completing the survey were new to Sixpence.**

## How did Sixpence impact parents' educational outcomes?

Sixpence tracks the educational outcomes for parents without a high school diploma. By June, of the 260 mothers who reported on their educational status, 41% had earned their diploma or GED and 28% were still enrolled in high school or working towards a GED. About a third (31%) were no longer pursuing any education. By June, of the 219 fathers who reported on their educational status, 36% had attained their diploma or GED, 7% were still working toward a diploma, and 57% were no longer pursuing any education.

Results indicate that the **majority (69%)** of mothers obtained their high school diploma or were still on track to meet this goal. While **some (41%)** fathers had similar success, most did not.



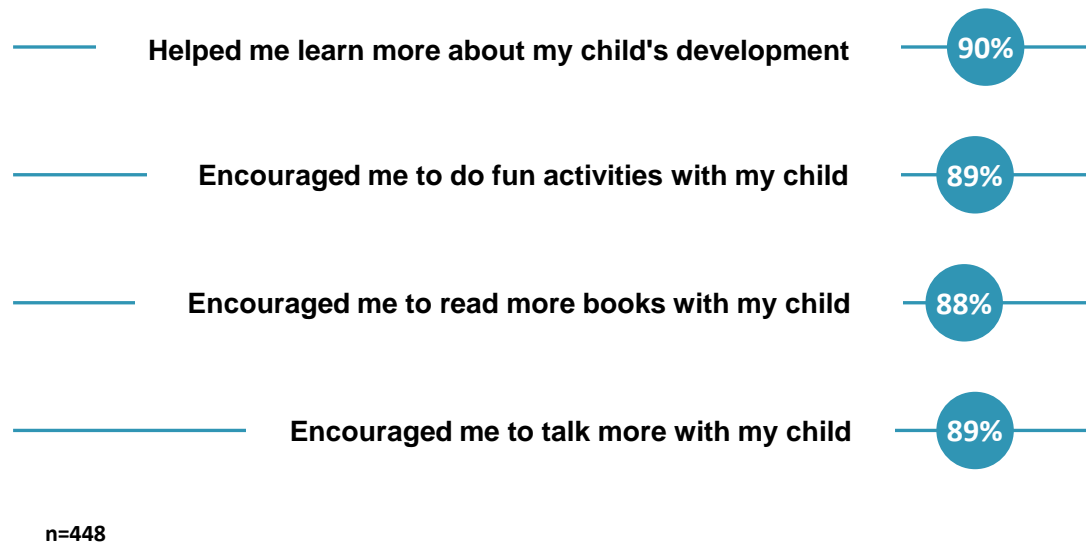
## What did parents think about Sixpence?

This year, evaluators invited parents to complete a satisfaction survey. Using a 4 point Likert scale, parents rated how much they agreed or disagreed with ten statements about their Sixpence experience that included their satisfaction with Sixpence, what they learned, their parenting practices, and their relationship with the Sixpence provider. There were also two open-ended questions about the program's strengths and suggestions to improve it.

Parents completed the survey anonymously and mailed it directly to the evaluation team at the Munroe-Meyer Institute. We received 448 surveys which is a return rate of 54%.

Parents reported that their home visitor or their child's teacher helped to increase their knowledge about their child and positively influenced how they interact with their child. In addition they rated their program and their service provider very positively.

### Parents strongly agree that Sixpence providers helped increase their parenting skills.



**98%** of parents agree or strongly agree that Sixpence has made them a better parent.

**95%** of parents strongly agree that their Sixpence provider cares about them and their child.

**87%** of parents strongly agree that their provider could help them find vital services such as transportation or medical care if they needed them.

**94%** of parents are very satisfied with Sixpence.

An analysis of time in program indicated that parent satisfaction with Sixpence did not depend on how long families were enrolled. New families were just as enthusiastic about their Sixpence experience as those who had been participating for over two years.

When asked what they like best about their Sixpence program, the top response (141) was how the program has helped them grow as a parent. They emphasized that what they have learned from their Sixpence provider about child development and being a parent has had an important impact on their families. The second most common response (69) was how much they enjoyed the play activities and the group socializations. Finally, a large number of parents (67) described the support they received from their provider in accessing resources such as parenting support, affordable housing, and assistance in filling out forms for services such as Medicaid.

About a quarter of the parents provided feedback to improve the program. The most frequent suggestion (73) was that Sixpence offer more outings, more classes and more socialization activities. Some parents (17) in center-based programs requested year-round services and more classes so that more children could participate. A few parents (9) shared concerns about staff turnover. It is interesting to note the overwhelmingly positive nature of the feedback. The majority (85%) of parents recommended that Sixpence expand its offerings and opportunities, indicating how much the parents value the program.

## CONCLUSIONS AND IMPLICATIONS

**Program Description:** Sixpence is completing its 8<sup>th</sup> year of implementation. This year it served more communities than ever, with 31 school district grantees located in 31 Nebraska counties. The majority of the programs have adopted a family engagement model (24), with others serving children in center-based programs (4) or a combination of both (3). A total of 1,107 children and 961 families were served. The majority of children were served in rural communities (68%) and in family engagement services (70%). This year, Sixpence continued to serve a high risk population with 61% of the families having three or more risk factors; last year the rate was 68%. Poverty was the leading risk factor. Program retention rates were high with 83% of families staying in Sixpence through the end of the program year. Of children who exited prematurely, 71% left in the first year of participation.

**Program Outcomes:** The majority (64%) of classrooms met the overall quality benchmark for providing quality environments for infants and toddlers. For those programs that met this indicator last year, their performance on the CLASS suggested that teachers consistently created emotionally supportive and caring classrooms. Their use of effective strategies to engage the children in learning received a moderate rating.

**Next Steps:** Consider ways to build teacher skills in engaging children in learning through the adoption of evidence-based instructional practices. This area has seen little growth over the past three years. Center-based programs might also want to explore how to enhance their Program Structure which includes the daily schedule, time for free play both indoors and outdoors, and providing group play activities.

Sixpence family engagement practices are high quality with the majority of home visits (94%) meeting the program quality benchmark. The greatest strength is in the area of Child Engagement. Most (85%) home visitors met the quality indicator for home visit practices and the average subscale scores met the quality indicator across all home visit practices. In this area, the greatest strength was in home visitors' development of relationships with the families they serve. The majority (67%) of home visitors met the quality indicator for home visit practices related to facilitation of parent-child interactions.

**Next Steps:** Continue to provide technical assistance to home visitors to support their practices in the area of facilitation of parent-child interactions. Consider training opportunities and technical assistance related to implementation of facilitative practices to extend and expand parent-child interactions during naturally occurring daily routines and activities.

**Child Outcomes:** Overall, the majority (range of 73% to 95%) of the children were meeting widely-held expectations across all developmental areas (physical, social emotional, cognitive, language, literacy and math) with fewer children meeting these expectations in math (73%) and literacy (80%). Sixpence has set a high standard for the program goal, that children will acquire comprehension, vocabulary, production and protective factor skills at the midpoint of average or higher. More children met this goal with respect to comprehension skills (46%) with fewer meeting the goal for vocabulary (36%) or for production skills (30%). Most language skills were stable over time, with only comprehension showing significant decreases over time. Of concern are the lower language skills noted for children who were associated with more risk factors or are ELL.

A strong majority (72%) of children met the program goal for social-emotional protective factors. Across the year, significant improvements were made with respect to children's initiative, attachment, and self-regulation skills, suggesting that the program is making a difference in these areas of development. Children in family engagement programs demonstrated the strongest social-emotional competencies.

**Next Steps:** Examine ways to enhance the learning environment for children with an emphasis on building language skills. Special attention needs to be directed to children who are ELL or experience multiple risks. Center-based programs may want to consider ways to enhance support for the social-emotional development of the children in their care and to engage parents to utilize similar strategies at home.

**Health Outcomes.** Health outcomes continue to be very positive with nearly every child meeting Sixpence health indicators. Most notably, 97% of the children have a medical home. An area of concern is the rate of children regularly exposed to cigarette smoke (14%). Prenatal outcomes indicate that all of the mothers received prenatal care and nearly all (91%) abstained from risky behaviors while pregnant. A majority (82%) of the mothers breast fed their babies but most (94%) stopped before their child reached six months of age. Of concern is that about a quarter (26%) of the women smoked during their pregnancy.

**Next Steps:** Consider new strategies to increase education about the harms of exposing children to cigarette smoke and support smoking cessation for pregnant mothers and others in the family. Consider ways to support breast feeding practices.

**Family Outcomes:** Parents had positive relationships with their children and demonstrated stable parent-child interaction skills over time. Parents who were associated with lower risk factors (<3) or whose language was English demonstrated the highest level of parenting skills.

Parents in Sixpence had high levels of protective factors that remained stable over time. Sub-group comparisons found that parents who were ELL demonstrated higher nurturing and attachment skills but reported lower concrete supports. Risk factors had a negative impact on parent protective factors.

**Next Steps:** Identify additional strategies that can support parents who are at high risk or ELL to adopt high quality parent-child interaction skills. Continue to support parents to maintain their high level of protective factors.

# ASSESSMENTS

Assessment	Authors	Scoring	Subject	Content
<b>Program Quality Measures</b>				
<b>ITERS-R</b> Infant/Toddler Environmental Rating Scale - Revised	Harms, Cryer, & Clifford, 2006	Scale 1-7 1 = inadequate 3 = minimal 5 = good 7 = excellent	Infant/Toddler classroom	Classroom layout, health & safety, play activities, teacher- child interactions, & program structure
<b>Toddler CLASS</b> <b>Infant CLASS</b> Classroom Assessment Scoring System	LaParo, Hamre, & Pianta, 2012 Hamre, et.al., 2014	Scale 1-7 1-2 = low range 3-5 = mid-range 6-7 = high range	Infant or Toddler classroom	Emotional support, & instructional support (Toddler only)
<b>HOVRS-A+ v.2</b> Home Visit Rating Scales – Adapted & Extended	Roggman, Cook, et. al., 2012	Scale 1-7 1 = needs training 7 = excellent	Home visitor	Home visit practices and family engagement during home visits
<b>Child Outcome Measures</b>				
<b>MacArthur-Bates CDI</b> Communications Development Inventories	Fenson, Marchman, et. al., 2007	Percentile Rank	8 to 30 months of age	Comprehension and production of language
<b>DAYC-2</b> Developmental Assessment of Young Children- 2 <sup>nd</sup> edition	Voress & Maddox, 2013	Standard Score 85-115 Average range	8 to 36 months of age	Receptive and Expressive Communication
<b>PPVT-IV</b> Peabody Picture Vocabulary Test	Dunn & Dunn, 2007	Standard Score 85-115 Average range	30 months of age and older	Receptive vocabulary
<b>DECA-IT</b> Devereux Early Childhood Assessment Infant/Toddlers	LeBuffe & Nagliere, 1999	Standard Score 41-59 Average range	4 months of age and older	Measures social- emotional protective factors & behavior concerns
<b>Parent Outcome Measures</b>				
<b>FRIENDS PFS</b> Protective Factors Survey	National Center for Community- Based Child Abuse Prevention, 2011	Scale 1-7 7 = highest rating, most protective factors	Parent Survey	Family resiliency, social supports, concrete supports, child development, nurturing & attachment
<b>KIPS</b> Keys to Interactive Parenting Scale	Comfort & Gordon, 2008	Five point Likert Scale, 12 items/3 domains	Parent and child age 4 months & up	Parent child play interactions and social, emotional & cognitive support

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