

Dual Language Learners

SEEDS of Learning Results in FY 2015-16 and 2016-17

SEEDS of Learning (SEEDS) is a nationally recognized professional development program for parents and educators of young children. The program is designed to help the children develop the early literacy skills they need to be ready for kindergarten. The primary components are:

- Workshops: Group workshops for Family Child Care Home providers on the SEEDS curriculum.
- Coaching: Early literacy-focused, high-dosage, on-site coaching sessions over a six month period for phase 4 (FY 15-16) and 10 months for phase 5 (FY 16-17)



SEEDS of Learning was first piloted by FIRST 5 Santa Clara County in 2012. Each year, SEEDS trained providers are assessed by their coaches in the fall and in the spring to determine the gains in the quality of the learning environment, using the Child/Home Early Language and Literacy Observation Tool (CHELLO, Neuman, Koh, & Dwyer, 2008). Children in the SEEDS trained classrooms are assessed in the fall and spring to measure the gains in early literacy, using:

- Individual Growth & Development Indicators (IGDIs) for Infants and Toddlers: The evaluation used a portion of IGDI, the Early Communication Indicator (ECI), as a measure of how children ages 6 months to 3 years age express themselves through gestures, vocalizations, single words, and multiple words.
- myIGDIs for Preschool Children: The picture naming measure of myIGDIs was used to assess the language and literacy development of children 3-5 years old.
- Phonological Awareness Literacy Screening for Preschoolers (PALS): PALS-PreK (Invernizzi, Sullivan, Meier, & Swank, 2001) was used to measure emergent literacy, including Upper-Case Alphabet Recognition, Lower-Case Alphabet Recognition, Letter Sounds, and Name Writing of children 3-5 years old.

Child Demographics

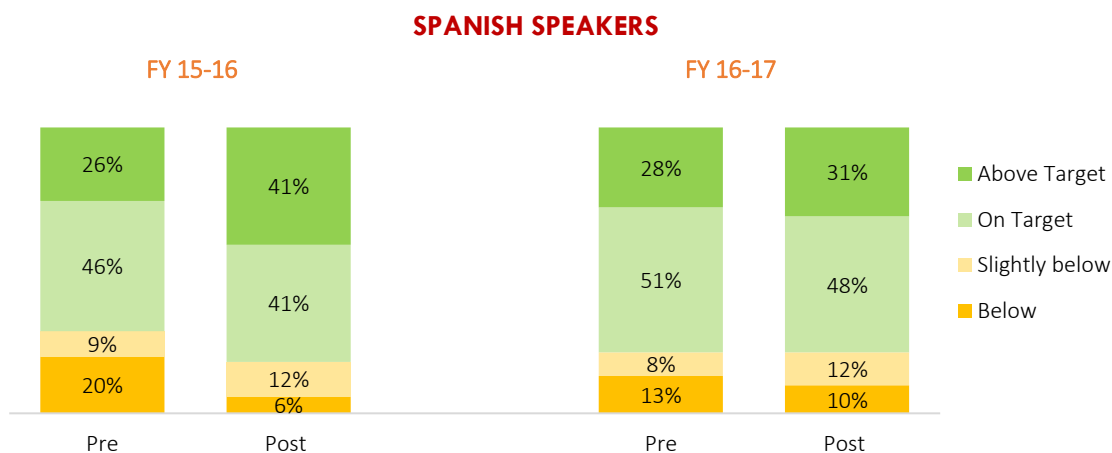
Due to the increased number of participating providers, the number of children served increased from 246 in FY 15-16 to 589 in FY 16-17. The majority of children in FY 16-17 were Hispanic (56%) and about a third used Spanish as their primary language (36%). The program served slightly more children under the age of three than preschool age children.

The following report provides a snapshot of findings for children whose primary language was Spanish, as compared to English speakers.

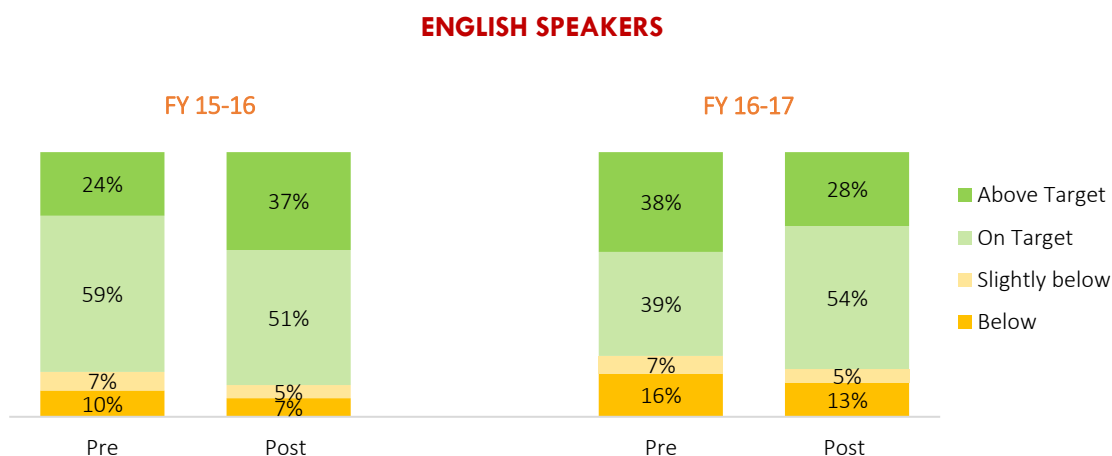
Spanish speaking infants and toddlers developed language foundations at the same rate as English speaking children.

Children's early communication was assessed using a portion of the Individual Growth & Development Indicators (IGDI) tool for Infants and Toddlers. The Early Communication Indicator measure of the IGDI assesses how children ages 6 months up to three years express themselves through gestures, vocalizations, single words, and multiple words. When cross-tabulated by language, the results in each year showed that Spanish speakers were less likely to be *Below Target* at the time of their post assessment, as compared to their pre assessment. Results were similar for English speakers. In FY 15-16, Spanish speakers experienced dramatic improvements at the top end of the scale, as seen by the increased proportion of children rated as *Above Target* in early literacy skills from pre to post assessment. This change was not as pronounced however in FY 16-17, a trend that was observed for English speakers in FY 15-16 as well. On the post assessments, Spanish speaking children were slightly more likely than English speaking children to be *Above Target*.

Figure 1. Percentage of Infants and Toddlers at Each Level of Overall Literacy Development



Source: Individual Growth & Development Indicators (IGDIs). FY 15-16 N=35 Spanish. FY 16-17 =61 Spanish.



Source: Individual Growth & Development Indicators (IGDIs). FY 15-16 N = 41 English; FY 16-17 N = 61 English

Though age referenced norms are not established for the specific domains of the IGDI tool, it is still useful to assess change over time in these dimensions, with the note that some portion of

the change will be due to maturation of the children between pre and post assessment. The chart below shows that, in FY 15-16 and FY 16-17, the mean scores of children improved from pre to post assessment. When disaggregated by children's primary language, the data revealed that Spanish speakers experienced growth in early literacy skills similar to that of English speakers, and results were consistent from year to year for both groups of children.

Figure 2. Early Communication Gains of Children Ages 6 Months - 3 years, By Domain

SPANISH SPEAKERS

IGDI LITERACY DOMAIN	FY 15-16 PRE	FY 15-16 POST	EFFECT SIZE	FY 16-17 PRE	FY 16-17 POST	EFFECT SIZE
Gestures	13.3	19.7	0.71 (M)	18.7	19.8	0.52 (M)
Vocalizations	16.8	24.6	0.65 (M)	19.8	18.9	0.52 (M)
Single Words	7.0	10.5	0.61 (M)	5.8	16.3	0.74 (M)
Multiple Words	2.2	7.09	0.67 (M)	1.2	10.1	0.73 (M)
Overall Score	8.5	14.4	0.76 (M)	8.9	17.0	0.75 (M)

Source: Individual Growth & Development Indicators (IGDIs). FY 15-16 n=35. FY 16-17 n=61. Effect size reference: Small: 0.20 – 0.49, Medium: 0.50 – 0.79, Large: > 0.80.

ENGLISH SPEAKERS

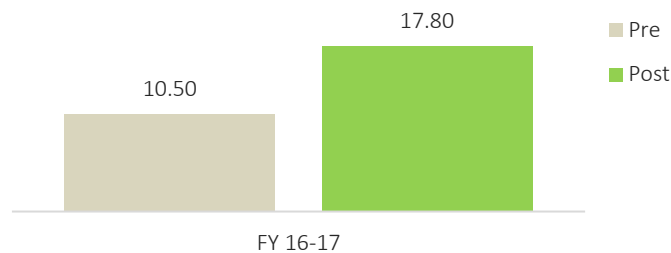
IGDI LITERACY DOMAIN	FY 15-16 PRE	FY 15-16 POST	EFFECT SIZE	FY 16-17 PRE	FY 16-17 POST	EFFECT SIZE
Gestures	12.1	20.2	0.73 (M)	13.9	21.5	0.62 (M)
Vocalizations	17.2	23.8	0.62 (M)	15.5	13.6	0.55 (M)
Single Words	7.9	13.2	0.65 (M)	7.8	14.7	0.66 (M)
Multiple Words	2.4	7.5	0.71 (M)	4.0	13.7	0.71 (M)
Overall Score	8.7	15.5	0.80 (L)	9.5	17.6	0.70 (M)

Source: Individual Growth & Development Indicators (IGDIs) FY 15-16 n=41 FY 16-17 n=61. Effect size reference: Small: 0.20 – 0.49, Medium: 0.50 – 0.79, Large: > 0.80.

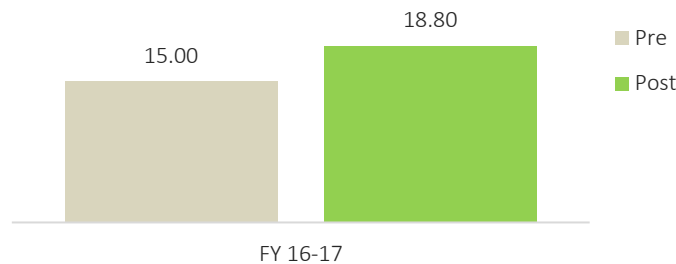
The vocabulary skills of preschool aged Spanish speakers also improved.

myIGDIs are a set of early childhood assessment tools for monitoring the growth and development of preschool aged children on the pathway to kindergarten. The picture naming measure of myIGDIs was used to assess the vocabulary skills of children in SEEDS classrooms. When disaggregated by children's primary language, the FY 16-17 data revealed that Spanish speakers experienced more growth in vocabulary than English speakers. (Data were not available for FY 15-16).

SPANISH SPEAKERS



ENGLISH SPEAKERS



Source: myIGDIs. FY 16-17 English n=39, Spanish n=41.

Spanish speaking children ages 3-5 gained essential literacy skills needed for kindergarten.

The figure below displays the percent of kindergarten bound children who met or exceeded the high end of the spring developmental range for four-year-olds on the Phonological Awareness Literacy Screening for Preschoolers (PALS) tool. For both FY 15-16 and FY 16-17, children increased their proficiency across the four measures, with bigger gains observed in the FY 16-17 year. In the spring of FY 16-17, Spanish speakers were more proficient in letter-sound correspondence and name writing than their English speaking peers.

Figure 3. Percent of Kindergarten-bound Children with Early Literacy Skills:

SPANISH SPEAKERS

PALS LITERACY DOMAIN	FY 15-16 PRE	FY 15-16 POST	NET PERCENTAGE POINT INCREASE	FY 16-17 PRE	FY 16-17 POST *	NET PERCENTAGE POINT INCREASE
Recognition of 21 or more Upper-case Letters	5%	24%	19%	19%	45%	26%
Recognition of 17 or more Lower-case Letters	8%	20%	12%	19%	56%	36%
Correctly name 9 or more Letter Sounds	8%	20%	12%	13%	75%	62%
Name-writing score of 7	14%	41%	27%	39%	84%	45%

Source: PALS. FY 15-16 N = 30-37. FY 16-17 N = 27-31. Note: *p<.01 on all four domains.

ENGLISH SPEAKERS

PALS LITERACY DOMAIN	FY 15-16 PRE	FY 15-16 POST	NET PERCENTAGE POINT INCREASE	FY 16-17 PRE	FY 16-17 POST *	NET PERCENTAGE POINT INCREASE
Recognition of 21 or more Upper-case Letters	24%	40%	16%	42%	71%	29%
Recognition of 17 or more Lower-case Letters	28%	53%	25%	33%	77%	44%
Correctly name 9 or more Letter Sounds	20%	47%	27%	17%	71%	55%
Name-writing score of 7	28%	40%	12%	21%	74%	53%

Source: PALS. FY 15-16 N = 19-25. FY 16-17 N = 21-24. Note: *p<.01 on all four domains.

Parents/Caregivers gained tools to support their child's school readiness.

SEEDS of Learning (SEEDS) also has a component for parents to learn ways to help their child develop the early literacy skills and the social-emotional foundation needed for kindergarten. In FY 16-17, 562 parents/caregivers participated in a SEEDS workshop at a Family Resource Center. These workshop survey data were disaggregated by the primary language of parents' children.

After participating in a SEEDS workshop, parents of Spanish and English speaking children reported increased knowledge and confidence in being able to support their children's language development. For instance, 96% of parents/caregivers in both groups *Agreed or Strongly Agreed* that they knew how to have a "Strive for 5" conversation with their child, in which the caregiver and child have five or more rounds or exchanges of communication per conversation. The end of workshop scores were slightly higher for parents of Spanish speaking children, but not significantly so.

Figure 4. Parental Understanding of Communication with Their Child (FY 16-17)



Source: SEEDS for Parents Retrospective Pre/ Post survey, FY 16-17. Scale: 1 = Strongly Disagree and 5 = Strongly Agree. English n ranges from 53 to 118 depending on the question, and Spanish n ranges from 100 to 137.

Conclusion

The SEEDS for Learning data for FY 15-16 and FY 16-17 showed us that Spanish speaking children in Family Child Care Home settings as well as in their homes experienced positive changes related to early literacy. For instance:

- Individual Growth & Development Indicators (IGDIs) data revealed that Spanish speaking children increased their ability to express themselves through gestures, vocalizations, single words, and multiple words at about the same rate as English speaking children, and that Spanish speaking children were more slightly likely than English speaking children to be *Above Target* on their post assessments (41% vs 37% in FY 15-16, 31% vs 28% in FY 16-17, respectively).
- myIGDIs data for preschool-aged children showed that in FY 16-17, Spanish speaking children increased their vocabulary, as seen by the number of pictures correctly named, and that this increase from pre to post assessment (average of 7.3 pictures) was twice as large as it was for English speakers (3.8 pictures).
- Phonological Awareness Literacy Screening for Preschoolers (PALS) data, including Upper-Case Alphabet Recognition, Lower-Case Alphabet Recognition, Letter Sounds, and Name Writing, showed that in the spring of FY 16-17, Spanish speakers were more proficient than English speakers in letter-sound correspondence (75% vs. 71%, respectively) and name writing (84% vs. 74%, respectively). Additionally, the percent of Spanish speaking children who could recognize 17 or more lower case letters increased from 20% to 56% from pre to post assessment.
- SEEDS of Learning data gathered from parent workshops also showed there was a large increase in the percentage of Spanish speaking parents who agreed or strongly agreed with key practices that support home literacy:
 - *Creating a literacy-rich environment is important for my child's development:* increased from 48% to 98%
 - *I know how to build a Strive for 5 conversation with my child to develop their communication skills:* increased from 47% to 96%
 - *I know the importance of having conversations with my child throughout the day:* Increased from 50% to 99%
 - *I have tools to provide my child with clear expectations for his/her behavior:* Increased from 39% to 99%

Taken together, these findings suggest that FIRST 5 Santa Clara County's SEEDS for Learning program is developing the early literacy skills of Spanish speaking children from infancy, and that that these gains persist through the prekindergarten years. Ultimately, we hope these skills help to narrow the kindergarten readiness and third grade reading gaps between dual language learners and their peers.