

Evaluation of AVANCE 2015-16

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At-a-Glance

AVANCE – Dallas is a non-profit organization that provides education, coaching, and tools to at-risk families. The primary goal of the program is to train parents to become the first teachers of their infant to three-year-old children. In 2015-16, the program was housed in 26 classrooms in 21 elementary schools in the Dallas Independent School District (Dallas ISD). It strived to engage parents, inspire children, and build communities in at-risk neighborhoods. The AVANCE curriculum consisted of 32 weeks of 4-hour classroom sessions during which parents attended instruction while children engaged in educational and culturally- and age-appropriate activities focused on their social, emotional, cognitive, and physical development. Families also participated in approximately seven monthly home visits during which an instructor engaged in educational play with families. In addition to parent/child education and home visitation, AVANCE offered weekly book clubs and enrichment programs for parents.

The program budget for AVANCE was \$1,900,000 for program year 2015-16. Of this \$700,000 was from the United Way, \$400,000 was from Dallas ISD general operating funds, \$350,000 was from Zero to Five Funders Collaborative, and \$450,000 was from other external funding sources such as foundations, corporations, and individuals.

This evaluation describes the AVANCE program as it was implemented in the Dallas ISD. This information was collected through interviews with the program director of AVANCE. This evaluation also reports data regarding participant characteristics, the percentage of children who met or exceeded age-appropriate benchmarks at the beginning and end of the 2015-16 academic year, and key findings from a survey of parent involvement. All participant and assessment data were provided by the AVANCE program office.

What were the characteristics of the AVANCE program and participants?

Eligibility and recruitment. No cultural or financial requirements governed eligibility of families who participated in AVANCE. Most recruiting took place door-to-door in neighborhoods around campuses with high poverty rates. The lessons were taught in the language of the classroom.¹ The core AVANCE parenting program lasted one year, and parents were allowed to re-enroll in the program after three years in the event of a new child.²

Classroom sessions. Parents and children generally were separated during four-hour classroom sessions. Each of these hours typically had a different purpose. The first hour was dedicated to learning toy-making,³ and the second was dedicated to learning a parenting skill supporting social, cognitive, physical, or emotional child development. In the third hour, either visitors were invited to inform parents about available community resources or AVANCE instructors presented useful topics (e.g., nutrition, finances). In alternating weeks, the fourth hour was used either for volunteer leadership projects in schools or for parent/child literacy-related activities (e.g., storytelling, active listening).⁴

Children in classroom sessions were grouped into three age groups (birth to one-year-olds, two-year-olds to younger three-year-olds, and older three-year-olds to four-year-olds). Classrooms were separated into several learning centers, where children participated in self-directed activities per individualized, assessment-based plans.

Home visits. Parents and children participated together in seven home visits per year. In these sessions, the home visitor engaged parents and children in educational play to encourage bonding. Sessions were recorded and videos were played for

¹ AVANCE is primarily a Spanish-language program, although it sponsored a one-semester pilot program this year in English. Data for this pilot program are not addressed specifically in separate analyses because of low enrollment rates.

² A reason some parents would do this is to provide the experience for their children.

³ Participants made 17 toys during the course of the program with household materials or kits provided by AVANCE. The goal was to teach parents that they did not need to spend a lot of money to make toys that helped engage and educate their children. These toys also

helped tie the parents' child development curriculum to their children in the real world. For example, parents made small storybooks out of used file folders and then read and shared these stories on topics related to the curriculum (e.g., feelings, shapes, colors) with their children. They also made culturally-correct dolls and pillows that were used for the same purpose.

⁴ Children were allowed to keep the books that they used in these joint sessions, and parents learned that they could use storytelling if they were uncomfortable reading. Sometimes these sessions involved performing skits or crafts to connect the book to real life experiences.

parents as the year progressed to show them how much interaction with their children changed.

Personnel. As of January 2016, AVANCE employed 62 full-time staff members. These staff members included four administrators and four coordinators presiding over eight teams. Each team served five schools (one per day), and included a parent educator, a toy-making home visitor, a lead early childhood teacher, and at least three additional teachers, depending on the number of children on site.

Other AVANCE programs. After completing the one-year core program, parents could participate in one of three additional programs. The first was a 12-class leadership academy that instructed parents about volunteering in schools through development of personal skills (e.g., self-esteem) and leadership skills (e.g., teamwork, money management, people skills). In addition, AVANCE offered 90-minute weekly book clubs,⁵ workplace English language classes, and an opportunity to participate in a year of training to become home visitors who coach families on infant mental health or asthma management.⁶

Parents. Of 1,008 parents enrolled in AVANCE this year, 698 (69.2%) resided within the Dallas ISD. Of those, 576 (82.5%) graduated from the program. Parents were an average of 32.2 years old (range: 17 to 66). See Table 1 for a summary of the characteristics of most AVANCE parents.

Table 1: Dallas ISD AVANCE Parent Characteristics

	%
Female	95.4
Hispanic/Latino	95.5
Born in Mexico	83.7
Married/Living with Spouse	62.8
Living in Apartment	40.5
Own Home	27.8
Primary Home Language: Spanish	81.9
Homemaker	71.9
Job Wages Primary Income Source	96.4

Source: AVANCE program office data files. Note: N = 576; Sample includes parents who resided in the Dallas ISD and who graduated from the program in academic year 2015-16.

Children. AVANCE parent graduates in the Dallas ISD participated with one (84.9%), two (14.5%) or three (0.6%) children, for a total of 667 child participants. These children were an average of 2.5 years old (range:

0 to 5.5), were 48.0 percent female, and 93.9 percent Hispanic. Most (95.4%) were born in the United States.

Data Integrity

Some data integrity issues introduced an undetermined margin of error for the outcomes reported in this evaluation. Data for enrollment, demographics, and each assessment were provided in separate Excel spreadsheets, but no consistent primary key was provided to link records among the files. In most cases, this resulted in using parent and/or child first and last name and birthdate (when available) to link records from files. Unfortunately, names were not spelled consistently in all records, resulting in a high potential for missing data in all analyses. In addition, random strings of the letter 'W' were appended to the end of some last and first names in some datasets,⁷ deepening the problem. Although the evaluator remedied as many of these issues as possible,⁸ results should be reviewed with caution because of potential for dropped records.

What changes in age-appropriate development occurred from the beginning to end of the year?

AVANCE staff members administered two assessments at both the beginning and the end of the academic year to measure age-appropriate development. The *Ages and Stages Questionnaires (ASQ-3)*⁹ were used for children ages zero to two, and the *School Readiness Survey (SRS)* was administered for children ages three and above.

Ages & Stages Questionnaires (ASQ-3)

Methodology. The ASQ-3 is a developmental and social-emotional screening instrument for children from birth to age six. AVANCE used this instrument to screen children from birth to two years. Because it was designed to identify developmental progress and delays, scoring of the ASQ-3 is dependent on a child's age in months. Although the AVANCE office provided raw ASQ-3 scores, they were unable to provide individual-level overall scores to indicate whether a child scored at the age-appropriate level.¹⁰ According to program staff members, they provided raw data for processing to a consultant who returned only final results. The AVANCE office provided the final rates of AVANCE children from birth to age two who were at the

⁵ Book clubs also welcomed parents who had not graduated from AVANCE's core program.

⁶ Availability of these programs each year is subject to funding.

⁷ The AVANCE office indicated that these stray letters were a result of stray marks on scanned data entry forms.

⁸ For example, the evaluator wrote code to remove these extraneous letters, resulting in higher match rates.

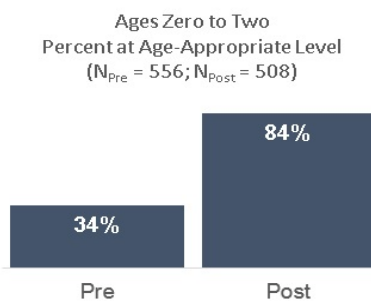
⁹ For more information, see <http://www.agesandstages.com>.

¹⁰ The program was also unable to provide the algorithms for calculating scores at each age level or questionnaires or instructions written in English for the evaluator to develop a tool for calculating scores. Thus, it was not possible for the evaluator to conduct Dallas ISD-specific analyses.

age-appropriate level at both pre- and post-test for all participants. (It was not possible for the evaluator to select only children of graduate parents residing in Dallas ISD). These results were included in this document. In addition, it is an important limitation that the sample sizes reported for pre- and post-test calculations were different, indicating that analyses were not limited to children with both pre- and post-test scores.

Results. As shown in Figure 1, a higher percentage of AVANCE children scored at or above age level on the ASQ-3 at post-test (84%) than at pre-test (34%).

Figure 1. Rate of Children At or Above Age-Appropriate Development Level on ASQ-3



Source: AVANCE program office summary data. Note: Because of lack of student-level overall score data, it was not possible to select scores only for parent graduates residing in the Dallas ISD. The rates shown were calculated by AVANCE consultants and provided to the evaluator by the AVANCE office. Results shown are for all AVANCE participants, not only for children of parent graduates residing in the Dallas ISD.

School Readiness Survey (SRS)

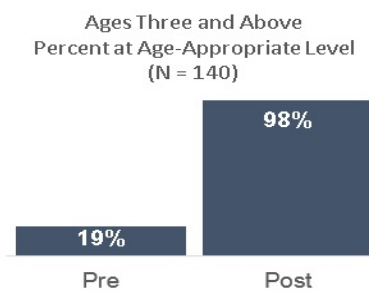
Methodology. The SRS was an informal tool developed by the AVANCE program that incorporated best practices from several validated developmental assessment instruments. It was administered to AVANCE children who were at least three years old. To complete this assessment, AVANCE staff members rated children on 51 skills as 1 (mastered), 2 (making progress), or 3 (needs help). The skills were grouped into the following categories: listening, oral language development, early literacy, written expression, and cognitive development. AVANCE considered children at or above age level if they were rated a 1 or 2 on at least 75 percent of instrument items. This threshold was used for this evaluation for consistency.

The AVANCE office provided SRS data. Pre- and post-test data were available for 415 children when records were joined on first and last name. These

records were then joined to parent data using each child's first and last name resulting in 140 children of parent graduates of the program who resided in the Dallas ISD with pre- and post-test records. Using these data, the evaluator calculated the percentage of scored items that were rated one or two. Percentages of at least 75 percent were flagged as at or above age level. Finally, the rate of children at an age-appropriate development level was calculated both for the pre- and post-test.

Results. As shown in Figure 2, a higher percentage of AVANCE children scored at age level on the SRS at post-test (98%) than at pre-test (19%).

Figure 2. Rate of Children At or Above Age-Appropriate Development Level on the School Readiness Survey



Source: AVANCE program office data files. Note: Sample includes parents who resided in the Dallas ISD who graduated from the AVANCE program. Only parents with pre- and post-test scores were included in analyses.

What were changes in parent involvement from the beginning to end of the year?

AVANCE Parent Inventory (API)

Methodology. The API was an inventory of questions that measured parenting knowledge and behavior. This instrument was administered both at the beginning and the end of the academic year to all AVANCE parents. This evaluation focused on the survey's behavioral questions. These questions asked the number of days per week or times per month the parent or child engaged in healthy behaviors and parent/child engagement activities.

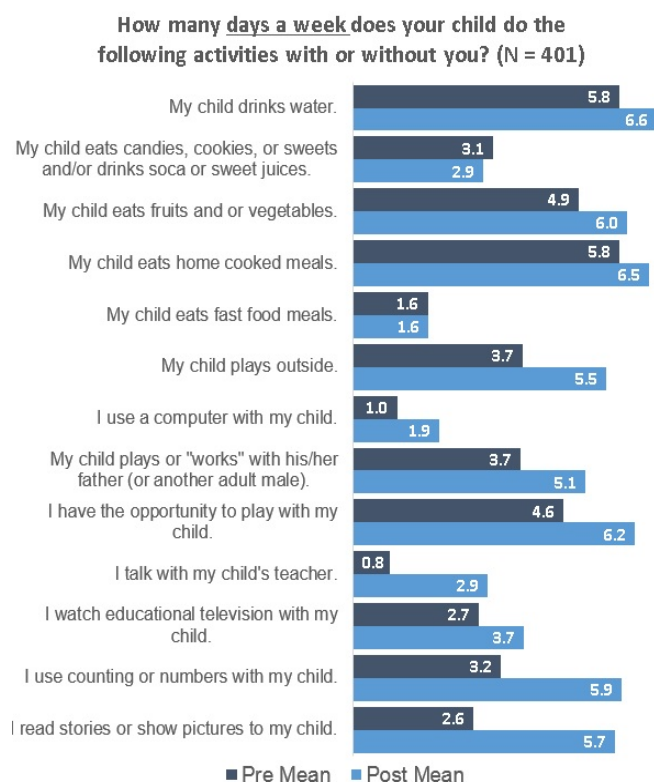
The AVANCE office provided API data. A total of 625 parent records included pre- and post-test data when joined using parent first and last names. These records were then joined to the parent data using participant identification numbers¹¹ to filter for graduate parents who resided within the Dallas ISD. This resulted in a

¹¹ The API data was the only dataset that included a participant identification number that could be linked to the parent enrollment data.

dataset with pre- and post-test data for 401 parents. The evaluator averaged responses for each question at both pre- and post-test.

Results. As shown in Figure 3, compared to the pre-test, at post-test the average days per week parents engaged in activities with their children increased across the board, as did the frequency of children's healthy behaviors. Most notable were increases in average days spent counting/using numbers (2.7 days per week average increase) and reading stories/showing pictures to their children (3.1 days per week average increase). Parents also reported talking to their children's teachers more often (2.1 days per week average increase).

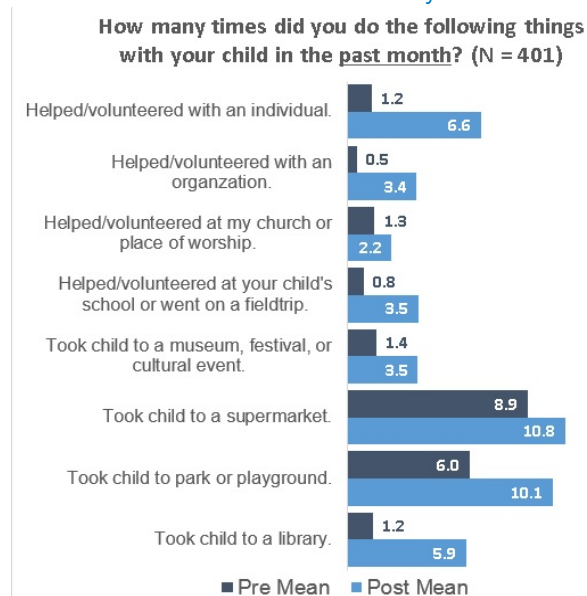
Figure 3. 2015-16 AVANCE Parent Inventory (API) Pre and Post Days Per Week Per Activity



Source: AVANCE program office data files. Note: Sample includes parents who resided in the Dallas ISD who graduated from the AVANCE program. Only parents with pre- and post-test scores were included in analyses.

As shown in Figure 4, the number of times per month that parents engaged with their children in a variety of activities also increased across the board. The strongest gains occurred for helping/volunteering with an individual (5.4 times per month average increase), taking children to the library (4.7 times per month average increase), and taking children to the park or playground (4.1 times per month average increase).

Figure 4. 2015-16 AVANCE Parent Inventory (API) Pre and Post Times Per Month Per Activity



Source: AVANCE program office data files. Note: Sample includes parents who resided in the Dallas ISD who graduated from the AVANCE program. Only parents with pre- and post-test scores were included in analyses.

Summary

Despite an undetermined margin of error introduced into these analyses by data challenges, AVANCE participants showed remarkable growth in age-appropriate development, parent/child engagement, and health-related behaviors at the end of the program year when compared to the beginning of the year. Based on the results of this evaluation, the following recommendations are offered for future consideration.

Recommendations

English expansion. With the exception of a one-semester English-speaking pilot classroom this year, all AVANCE classes were conducted in Spanish. Program leadership should increase efforts to encourage more English-speaking participants to enroll in the program, especially given the decided developmental gains for parents and children who participate. AVANCE is unique in offering services that can benefit children who are very young (birth to two years), and could benefit a greater diversity of residents in the Dallas ISD boundaries.

Include AVANCE participation in evaluation of other major Dallas ISD early childhood programs. Parents in the Dallas ISD have a wide variety of early childhood options available to their children (e.g., HIPPY, Dallas ISD pre-Kindergarten), and many children attend more

than one program before enrolling in kindergarten. Thus, it is becoming more difficult to evaluate the efficacy of any one early childhood program exclusively, particularly with regard to long-term outcomes. Evaluators and program managers should consider dosage of participation in all major programs as a variable in future evaluations of early childhood education. Data structures and systems must be carefully reviewed and enhanced to support this goal.

Carefully examine data integrity. AVANCE enrollment is strong and the program offers several opportunities beyond the core program for parents to continue their personal development. More efficient methods of data management beyond Excel spreadsheets should be explored. Key identifiers for parent and child participants are critical for more accurate linking from one dataset to another.¹² More advanced data structures will allow filtering records on all dimensions as well as reduce data loss resulting from bad data in key fields. For example, joining on first and last name and birthdate (when available) in this evaluation resulted in dropping many records that potentially could have been included in analyses. In addition, the program should work with the Dallas ISD to identify students who have participated in AVANCE in the main district databases. An AVANCE identifier would help future analysts identify students to include in long-term outcome analyses. Finally, data returned from consultants should not only include final results. Individual-level data would allow for data integrity checks and deeper analyses, as required.

An electronic copy of this report can be found at www.dallasisd.org/Page/888. For more information, please contact Program Evaluation at 972-925-6457.

¹² The program has indicated that they are moving toward using primary keys to identify participants among data files in the future. This recommendation is included here to reinforce this decision and to stress its importance for future evaluation collaborations.