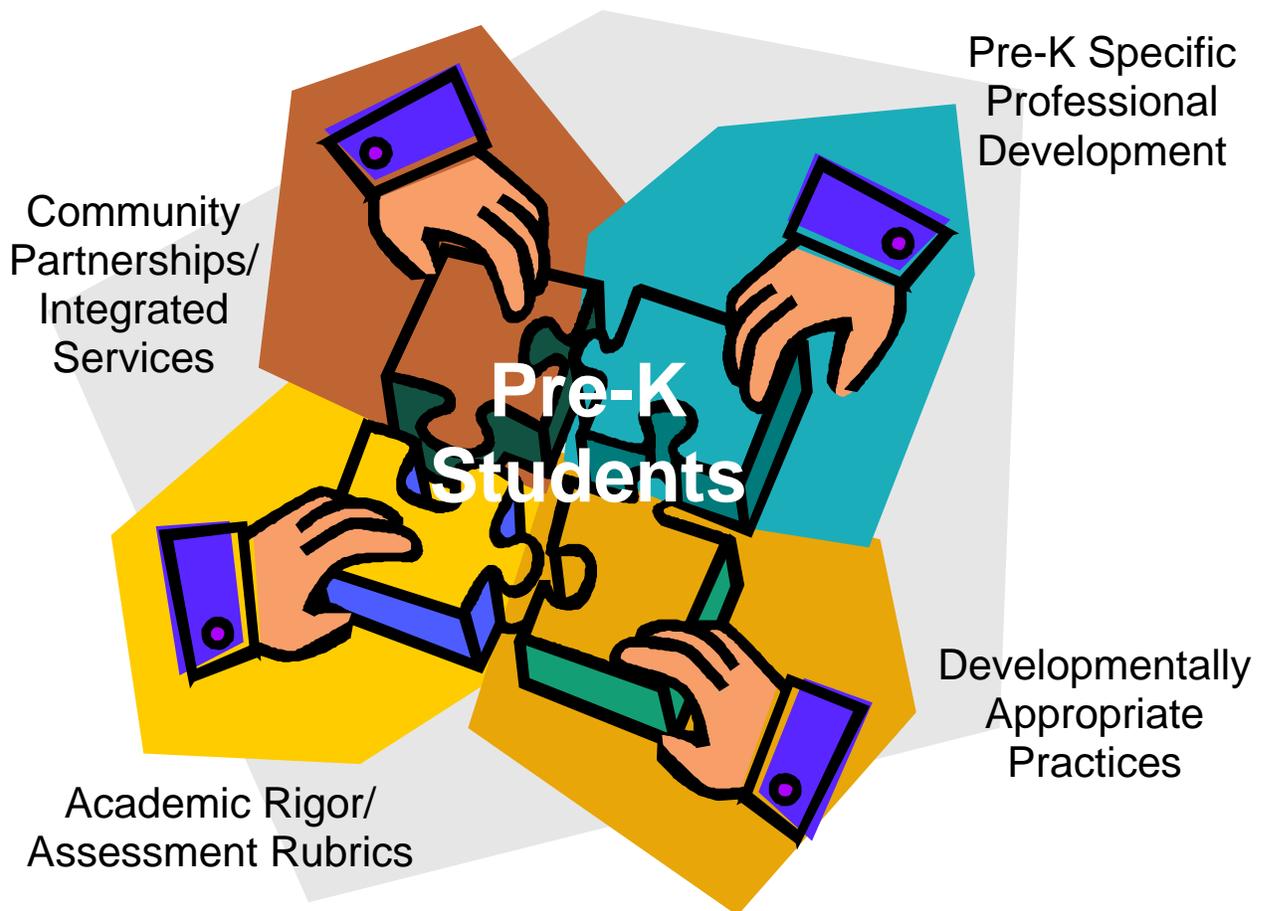


AISD Prekindergarten Expansion Grant Evaluation Report, 2006-2007

A New Vision for Young Learners



Austin Independent School District
Department of Program Evaluation

November 2007

EXECUTIVE SUMMARY

Policy makers with an interest in school success no longer debate whether states should provide prekindergarten (pre-K). Despite the continuing discussion about what is developmentally appropriate for four-year-olds, it is agreed that students who come to school with a deficiency in experiences or in language need to accelerate their learning during pre-K to be ready for kindergarten. Because of the great need for early childhood education, the challenge is to provide high quality education in an affordable way.

The State of Texas, which serves more four-year-olds than does any other state, is no stranger to this dilemma. In 2003 and in 2005, Texas legislators passed bills to promote school readiness by encouraging the coordination of early childhood services, including Head Start agencies, public school pre-K programs, and private and nonprofit early childhood programs. The major emphasis of the bills was to cost-effectively serve more children in high quality preschools.

In Texas, free half-day pre-K is available to four-year-olds who meet one of these eligibility criteria: limited English proficient (LEP), economically disadvantaged, homeless, or child of an active duty military parent (AISD, 2007). Additional state funding is available to districts through the competitive Prekindergarten Expansion Grant. To qualify for this funding in the 2006–2007 school year, districts were required to develop a School Readiness Integration Plan to describe how the district would accomplish the integration of services for pre-K students and their families.

PROGRAM DESCRIPTION

Austin Independent School District (AISD) provided full-day pre-K to 5,454 four-year-olds in 2006–2007 at 65 elementary campuses and the Read Prekindergarten Demonstration School (Read). According to AISD 2006–2007 student records, demographic and enrollment information for pre-K students included the following:

- Eighty-eight percent (n = 4,796) of students were from low-income families.
- Fifty-five percent of students (n = 3,013) were English language learners (ELLs), students whose home language was not English.
- Homeless students (n = 120) comprised 2% of all pre-K students.
- More than half (51%) of pre-K students qualified by both income and language.
- Forty-nine languages were reported by parents as spoken in the homes of pre-K students.
- Hispanics comprised the largest ethnic group (78%), followed by African Americans (12%), Anglo/others (6%), and Asians (4%).

The pre-K teaching staff was composed of 52% bilingual, 32% English-speaking, and 16% ESL (English as a second language) certified teachers. In the 2006–2007 school year, 167 (57%) pre-K teachers attended 2,970 hours of professional development activities directly related to pre-K instruction or classroom management (i.e., an average of 17.8 hours of completed training per teacher).

The estimated cost of the district's pre-K program (\$14 million) in 2006–2007 was funded as follows: 33% (\$4,525,841) from the Prekindergarten Expansion Grant, 67% (\$9,401,513) from local funds, and less than 1% (\$60,760) from Title I funds.

STUDENT ACADEMIC PROGRESS

Student performance gains from pretest to posttest on the English-language *Peabody Picture Vocabulary Test-III* (PPVT-III) and the Spanish-language *Test de Vocabulario en Imágenes Peabody* (TVIP) determined the effectiveness of language and literacy learning in the pre-K program. The PPVT-III and TVIP measure knowledge of receptive vocabulary in English and in Spanish, respectively. Standard test scores are based on national age norms, with a mean of 100 and a standard deviation of 15, for both tests. A standard score of 85–115 points indicates that a student is in the average range. For a student to maintain his or her standing relative to the national average, the gain score from pretest to posttest would be zero. Any gain greater than zero indicates that the student's performance improved compared with the national average.

A total of 1,718 pre-K students had valid PPVT-III/TVIP pre- and posttest scores (754 in English only and 964 in English and Spanish). Major findings from the 2006–2007 PPVT-III and TVIP district testing sample include the following:

- At the posttest, 77% (n = 1,319) of all students were in the average range on tests in their language of instruction (74% in Spanish and 81% in English).
- Gains for English-language students on the PPVT-III and for Spanish ELL students on the TVIP indicate that students showed growth that was about two times greater than expected for four-year-olds after a 7-month period of instruction.
- Seventy-six percent of English-language students made gains on the PPVT and 78% of all Spanish ELL students made gains on the TVIP, as measured from pretest to posttest.

The revised *AISD Pre-K Report Card Assessment Rubrics* (AISD, 2006a) has been a helpful tool for teachers to evaluate the academic progress of pre-K students. With the exception of results for science, the percentages of students on grade level in each subject area increased for each 9-week period and reached their highest level during the final 9 weeks. The content areas of mathematics and social studies had the highest percentages of students on grade level at the end of the year (90% and 88%, respectively).

Also important to readiness for kindergarten is social development. Growth in personal development was evident in the increase in the percentages of students meeting expectations on all traits, from 29% at the end of the first 9-week period to 67% at the end of the school year.

An analysis of 2007 Texas Assessment of Knowledge and Skills (TAKS) reading and mathematics data for a cohort of students who attended pre-K in the 2002–2003 school year indicates that those students who attended pre-K, especially English-language low-income

students, had TAKS reading and mathematics passing rates that were higher than district passing rates for low-income students.

CURRICULUM INITIATIVES

AISD is dedicated to improving early learning for disadvantaged four-year-olds. The full-day program provides a highly qualified teacher for each pre-K classroom. In addition to state pre-K guidelines and curriculum resources, AISD pre-K teachers have the *Pre-K Austin ISD Instructional Planning Guide* (IPG; AISD, 2005) and the revised *AISD Pre-K Report Card Assessment Rubrics* as tools to help prepare their students for kindergarten. Academic initiatives implemented in the 2006–2007 school year included the following:

- Implementation of the revised *Prekindergarten Assessment Rubric*: This increased academic rigor in several content areas. In addition, pre-K teachers used a new mathematics assessment to better inform instruction.
- Districtwide pre-K focus on inquiry-based science instruction: Under the leadership of the AISD science department, teachers were trained to promote scientific literacy and inquiry-based science.
- Search for a curriculum with explicit teaching of English vocabulary to ELL pre-K students: In spring 2007, Read ESL/bilingual teachers piloted the *Avenues-Vocabulary Builders* (2004) pre-K ESL curriculum by Hampton-Brown.

COMMUNITY PARTNERSHIPS

AISD has a long history of collaborating with the community. In the 2006–2007 school year, the AISD pre-K program participated in many innovative programs and partnerships to promote integration of services for pre-K students and their families. Community members, local non-profit agencies, and private daycare providers were involved in these major initiatives:

- Early Childhood Task Force: In May 2006, the AISD superintendent convened a committee of 15 community members and 9 AISD staff to discuss how best to serve the needs of AISD's youngest learners (AISD, 2006c).
- Satellite campus: AISD placed a pre-K teacher in Mt. Sinai Missionary Baptist Preschool, which served as a satellite campus for eligible four-year-olds.
- Head Start (Child, Inc.): Head Start provided instructional aides in 33 pre-K classrooms and visiting teachers in 45 classrooms during 2006–2007 and served the families of 832 low-income children with comprehensive health services.
- Texas Early Education Model (TEEM): TEEM is a state Center for Improving the Readiness of Children for Learning and Education (CIRCLE) program that integrates professional development activities and follow-up coaching for public school, child care, and Head Start teachers.
- WorkSource: The Greater Austin Area Workforce Board offered subsidized child care for eligible parents and training for child care providers. Funding to AISD allowed the hiring of an early childhood specialist to work with identified families.

- AmeriCorps for Community Engagement and Education (ACEE): AmeriCorps participants served AISD pre-K students for the first time at Read. Forty-two members attended literacy training and worked directly with students in small groups in the classrooms, library, and science laboratory.
- Tuition-based expansion of Becker Pre-K: A proposal to expand Becker Elementary School's pre-K program to include tuition-paying students was developed by district staff, parents, and neighborhood representatives. This collaboration satisfied the neighborhood's interest in retaining Becker as an elementary school and the district's need to maximize resources and facility use.

READ PREKINDERGARTEN DEMONSTRATION CENTER

In fall 2006, AISD opened Read, its first pre-K center focused on the needs of four-year-olds. In its first year of operation, Read has shown promise. Gains on the PPVT-III and TVIP for Read students were significantly higher than for students at other AISD schools with pre-K, when tested in the language of instruction. The science focus resulted in a higher percentage of Read students being on grade level (82%), compared with pre-K students at other schools (59%), at the end of the school year. These will be baseline data. A pre-K longitudinal study of the 2006–2007 Read pre-K students will track later years of learning in early elementary school to provide effectiveness feedback to pre-K program managers.

RECOMMENDATIONS

As state and national expectations become more rigorous, the educators of young children face many challenges. The district should continue to implement developmentally appropriate practices for pre-K, while supporting the academic rigor required for these four-year-olds to read on grade level by grade 3 and thereafter. The superintendent's Task Force on Early Childhood Education has recommended goals to help guide the district in expanding community partnerships and enhancing learning opportunities for all eligible four-year-olds in AISD (Bryant, Escame, & Ruiz, 2006). The district should work with the task force, early childhood specialists, and the community to implement the recommendations. The following recommendations for continued support to the pre-K program are offered to AISD decision makers:

- Support English language acquisition for bilingual and ESL students by providing professional development opportunities for pre-K teachers who will be using the *Hampton-Brown Avenues-Vocabulary Builders* (2004) curriculum in 2007–2008.
- Continue to seek meaningful partnerships with the community to improve educational opportunities for disadvantaged four-year-olds.
- Continue to provide high quality staff development opportunities to all pre-K teachers that will help them accelerate learning for their students and provide them with opportunities to observe and share teaching strategies with colleagues.
- Support Read as a demonstration site to develop best practices and innovative strategies that can be replicated in other schools in the district.

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INTRODUCTION

Policy makers with an interest in school success no longer debate whether states should provide prekindergarten (pre-K); that case has already been made to voters, educators, and researchers (Holcomb, 2006). A growing number of state and national leaders believe it is essential to expand high quality early learning and development opportunities for all young children before they reach kindergarten (Schmacher, Hamm, & Ewen, 2007). It is widely recognized that the path to our nation's future prosperity and security begins with the well-being of our children (Center on the Developing Child, 2007). Because of the great need for early childhood education, the challenge is to provide high quality education in an affordable way.

The State of Texas, which serves more four-year-olds than does any other state, is no stranger to this dilemma (Pre-K Now, 2007). In 2003, the 78th Texas Legislature passed Senate Bill 76, which promoted school readiness by requiring certain agencies to coordinate early childhood services, including Head Start agencies, public school pre-K programs, and private and nonprofit early childhood programs. The major emphasis of the bill was to cost-effectively serve more Texas children in high quality preschools. Senate Bill 23 (2005), passed by the 79th Texas Legislature, further expanded the school readiness program. In 2006–2007, the Austin Independent School District (AISD) developed a School Readiness Integration Plan to qualify for future funding through the Cycle 12 Prekindergarten Expansion Grant. This report summarizes the collaborations and initiatives that were part of the AISD pre-K program during the 2006–2007 school year, as well as the academic progress of pre-K students.

AISD PREKINDERGARTEN PROGRAM

AISD provides full-day pre-K for all eligible children who are four-years-old on or before September 1st of the current school year. Students must also qualify by meeting one of these criteria: limited English proficient (LEP), economically disadvantaged, homeless, or child of an active military parent (AISD, 2007). In this report, LEP students are referred to as English language learners (ELLs) and economically disadvantaged students are referred to as low-income students.

According to the description on the district's website (www.austinisd.org), the pre-K program promotes growth in all the areas of physical, social, emotional, and cognitive development for young children. Learning opportunities occur individually, in small groups, or in large groups. The content areas of focus in the pre-K classroom include language and literacy, mathematics, social studies, science, technology, health, visual arts, music, and physical education. In addition to academics, breakfast and lunch are provided, as well as outside play and rest time.

Learning centers are an integral part of the pre-K program in AISD. Centers provide

pre-K students with opportunities to learn about new academic concepts, as well as self-responsibility and how to follow directions, complete tasks, share materials, and communicate their needs. Examples of learning centers in the pre-K classroom include home living, creative dramatics, blocks, manipulatives, science, listening, art, library, alphabet centers, writing, storytelling/puppets, pocket chart with poetry, and mathematics.

LUCY READ PREKINDERGARTEN DEMONSTRATION SCHOOL

In fall 2006, AISD opened its first pre-K center focused on meeting the needs of four-year-olds. Lucy Read Prekindergarten Demonstration School (Read) served four-year-olds from three North Austin elementary schools (i.e., Cook, McBee, and Walnut Creek). The opening of Read was a result of the AISD Board of Trustee's approval of the district's *Realizing Our Vision 2010* (2006b). In this vision, the rationale for an early childhood/pre-K initiative included the following:

- Low-income students typically start kindergarten at least one full year behind others in reading and cognitive development.
- The greatest growth area for the Austin population is pre-K and kindergarten.
- A center for four-year-olds would provide enhanced focus on pre-K curriculum and teaching.
- A pilot was possible for the Special Education Inclusion Initiative in early childhood and pre-K.

In a memo to AISD personnel (May 25, 2006), Superintendent Pascal Forgione said of the school opening,

This groundbreaking facility will enable us to provide a comprehensive educational program to four-year-olds—an age that is increasingly being viewed as critical to success in the elementary years. I am proud that AISD will be preparing young learners in this innovative way.

Although the superintendent recommended that three pre-K centers be opened, only Read won Board of Trustees' approval to be opened in fall 2006.

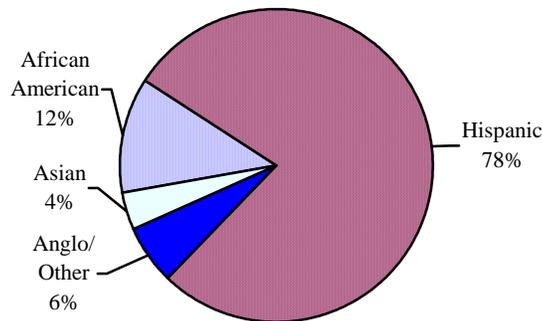
STUDENT INFORMATION

A total of 5,454 four-year-olds attended AISD pre-K during 2006–2007, compared with 5,014 in 2005–2006. Sixty-five AISD campuses and Read offered pre-K instruction in 2006–2007. According to AISD student records, demographic information for pre-K children in 2006–2007 included the following:

- The majority (53%) of students were male.
- Eighty-eight percent (n = 4,796) of students were from low-income families.
- Fifty-five percent of students (n = 3,013) were ELL students whose home language was not English.

- Homeless students (n = 120) comprised 2% of all pre-K students.
- More than half (n = 2,780) of students met both the limited-English and low-income criteria.
- As shown in Figure 1, Hispanic students comprised the largest ethnic group (n = 4,242), followed by African American (n = 686), Anglo/other (n = 309), and Asian (n = 216) students. The numbers of Hispanic and Asian students increased from 2005–2006 to 2006–2007, while the numbers of African American and Anglo students decreased.

Figure 1: Percentages of AISD Pre-K Students by Ethnicity, 2006–2007



Source: AISD Student Records, 2006–2007

PREKINDERGARTEN ENROLLMENT AND ATTENDANCE

After declining during the 2005–2006 school year to 5,014 students, the number of pre-K students enrolled in AISD during 2006–2007 increased by 9% to 5,454. The number of ELL students increased by 5%, and the number of low-income students increased by 4% from 2005–2006 to 2006–2007. Table 1 summarizes 5 years of program data, from 2002–2003 through 2006–2007. These data include all pre-K students served at any point in a given year.

Table 1: AISD Pre-K Summary Information, 2002–2003 through 2006–2007

Pre-K Information	2002–2003	2003–2004	2004–2005	2005–2006	2006–2007
Number of schools with pre-K	61	65	67	66	66*
Number of teachers	243	262	281	287	293
Number of pre-K students	4,414	4,499	5,097	5,014	5,454
Number low income students	4,060	4,184	4,798	4,632	4,796
Number ELL students	2,206	2,367	2,555	2,862	3,013

* Read Pre-K Center and Perez Elementary School opened, and Cook and McBee Elementary Schools no longer offered pre-K.

Note: Students can be both low income and ELL.

Source: AISD student and human resource records, 2002–2003 to 2006–2007

The number of pre-K students served at each of the 66 campuses varied widely in 2006–2007, ranging from 13 at Casis Elementary to 361 at Read. See Appendix A for a complete list of schools and the number of students served in 2006–2007.

Considerable variation existed between schools with respect to class size and language of instruction. The estimated pre-K student-teacher ratio in 2006–2007 was 15.8:1, down slightly from 15.9:1 in 2005–2006. These estimations were based on the Public Education Information System (PEIMS) accountability snapshot data (October 2005 and 2006) and the numbers of pre-K teachers employed at those times. Bilingual classrooms had an average of 2 more students than did English or English as a second language (ESL) classrooms (16.5 and 14.3, respectively). Almost half of the schools had pre-K class size averages above the estimated student-teacher ratio.

The average daily attendance historically has been lower for AISD pre-K than for other elementary grades. The average daily attendance for pre-K students in 2006–2007 was 94.2% (up slightly from 94.0% in 2005–2006), compared with 95.3% for kindergarten and 95.9% for grade 1 students. On the last day of school, 84% (n = 4,566) of all pre-K students who attended AISD pre-K during 2006–2007 were enrolled.

LANGUAGE OF INSTRUCTION

AISD offers pre-K instruction in English and Spanish, as well as Vietnamese (at Walnut Creek Elementary) and Korean (at Mathews Elementary). For students whose primary language was not English or Spanish (5%), English instruction was delivered by an ESL certified teacher. In 2006–2007, 52% of the pre-K students received the majority of their instruction in Spanish.

Forty-nine languages were reported by parents as spoken in the homes of this year's pre-K students. The languages reported with the most frequency were Spanish (n = 3,053, or 56%); English (n = 2,132, or 39%); Vietnamese (n = 55, or 1%); and Korean (n = 38, or 1%).

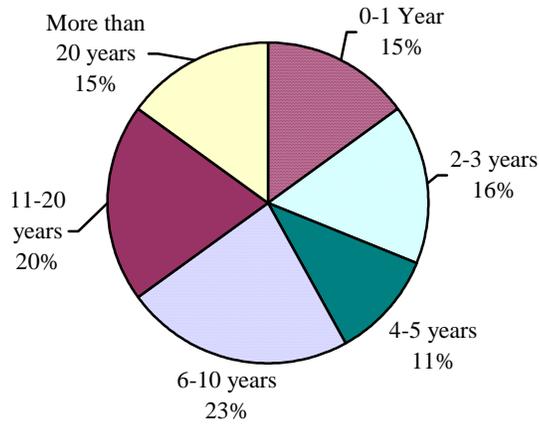
TEACHER INFORMATION

The pre-K teaching staff was composed of 153 bilingual (52%), 93 English-speaking (32%), and 47 ESL-certified (16%) teachers. AISD had 293 pre-K teachers in 2006–2007, with an average of 9.8 years of teaching experience (compared with 9.0 in 2005–2006). The overall average years of teaching experience for AISD elementary teachers was 12.5 in 2006–2007, which was 2.7 years more than the average for pre-K teachers.

The majority (n = 171, or 58%) of the pre-K teachers in AISD had 6 or more years of teaching experience. This represented a 30% increase in the number of teachers with 6 or more years experience, from a low in 2004–2005 (n = 132, or 47%). In 2006–2007, all AISD pre-K teachers met the highly qualified criteria for No Child Left Behind (NCLB, 2001). To be deemed highly qualified by NCLB, teachers must have a bachelor's degree and full state

certification or licensure. The percentage of teachers at each teaching experience level is shown in Figure 2.

Figure 2: Percentage of AISD Pre-K Teachers, by Years of Teaching Experience, 2006–2007



Source: AISD Human Resource files, 2006–2007

PREKINDERGARTEN BUDGET

The State of Texas Foundation School Program provides the funding for half-day pre-K to districts with at least 15 students who qualify. AISD applied for and received the state Cycle 12 Prekindergarten Expansion Grant in 2006–2007 to fund the additional half day of instruction. The grant funded full-day instruction at 47 of the 66 AISD schools with pre-K programs. Additional full-day pre-K classes had not been added to the grant since 2000 due to state budget constraints. Therefore, additional local funds were needed to fund the full-day program at the remaining schools.

The estimated cost of the district's pre-K program (\$14 million) in the 2006–2007 school year was funded as follows: 33% (\$4,525,841) from the Prekindergarten Expansion Grant, 67% (\$9,401,513) from local funds, and less than 1% (\$60,760) from Title I funds. These funds did not include transportation, food services, or indirect costs.

EVALUATION METHODOLOGY

EVALUATION OBJECTIVES

This evaluation of the AISD pre-K program included the following objectives:

- Describe pre-K program participants and services, per local, state, and federal reporting requirements
- Provide information for decision makers about program effectiveness to facilitate decisions about program modification
- Provide additional evaluation support for the newly opened Lucy Read Prekindergarten Demonstration School

DATA COLLECTION

Department of Program Evaluation (DPE) staff collected quantitative and qualitative data to determine program effectiveness, as well as to identify areas in need of improvement. A description of the types of data collected and the method(s) used to collect them follows.

- **Peabody Picture Vocabulary Tests:** Student performance gains from pretest to posttest on the English-language *Peabody Picture Vocabulary Test-III* (PPVT-III) and the Spanish-language *Test de Vocabulario en Imágenes Peabody* (TVIP) determined the effectiveness of language and literacy learning in the pre-K program.
- **Pre-K grade reports:** The *AISD Pre-K Report Card Assessment Rubrics* (AISD, 2006a) was used districtwide to report student performance in academic areas in 2006–2007. A sample of students' grades for academic subjects and personal development traits during each 9-week period was analyzed.
- **Teacher surveys:** Pre-K teachers were asked to respond to an online survey to give feedback about the strengths of the program and areas for improvement; Read teachers responded to a separate survey. Specific topics included professional development opportunities, curriculum and materials, effectiveness of the *Prekindergarten Assessment Rubric*, and district support of the pre-K program.
- **2007 Texas Assessment of Knowledge and Skills (TAKS):** To determine the long-term impact of the pre-K program, the 2007 TAKS reading scores for a cohort of grade 3 students who had attended an AISD pre-K program in 2002–2003 were compared with those of district grade 3 students who took 2007 TAKS reading and who were ELL and/or low income.

STUDENT ACADEMIC PERFORMANCE

LANGUAGE ARTS/PRE-READING

The importance of vocabulary knowledge has long been recognized in the development of reading skills. For this reason, the main assessment tools used to evaluate the AISD pre-K program were tests that measured growth in receptive (hearing) vocabulary as the foundation for later reading skills.

Background and Description of Assessments

The PPVT-III and the TVIP measure knowledge of receptive vocabulary in English and in Spanish, respectively (Dunn & Dunn, 1997). The PPVT-III has two parallel forms and the TVIP has one form. Each administration is individualized for the student, depending on the number of correct responses given. The tests were designed for persons 2 ½ through 90+ years of age and serve two purposes: (a) as an achievement test of receptive vocabulary attainment for standard English and (b) as a screening test of verbal ability.

Standard test scores are based on national age norms, with a mean of 100 and a standard deviation of 15 for both tests. A standard score of 85–115 points indicates that a student is in the average range. For a student to maintain his or her standing relative to the national average, the gain score from pretest to posttest must be zero. Because these tests are age-normed, a student must have a raw score about 8–10 points higher in the spring to get the same standard score as in the fall. Any gain greater than zero indicates that the student's performance improved compared with the national average. Evidence of gains greater than zero, on average, can be used to infer AISD pre-K program effectiveness.

Administration of PPVT-III and TVIP in AISD

In fall 2006, the PPVT-III was administered to pre-K students at Read and to a random sample of pre-K students at the other 65 campuses with pre-K classes. Spanish ELL students were also tested in Spanish (TVIP). Although the PPVT-III is not normed for LEP students, Spanish ELL students were tested in English (in addition to Spanish) to measure growth in English language acquisition, which is part of the ESL component of pre-K. The posttest was administered in April 2007 to pretested students who were enrolled in AISD. The testing sample was designed to closely match the demographic characteristics of students in the AISD pre-K population.

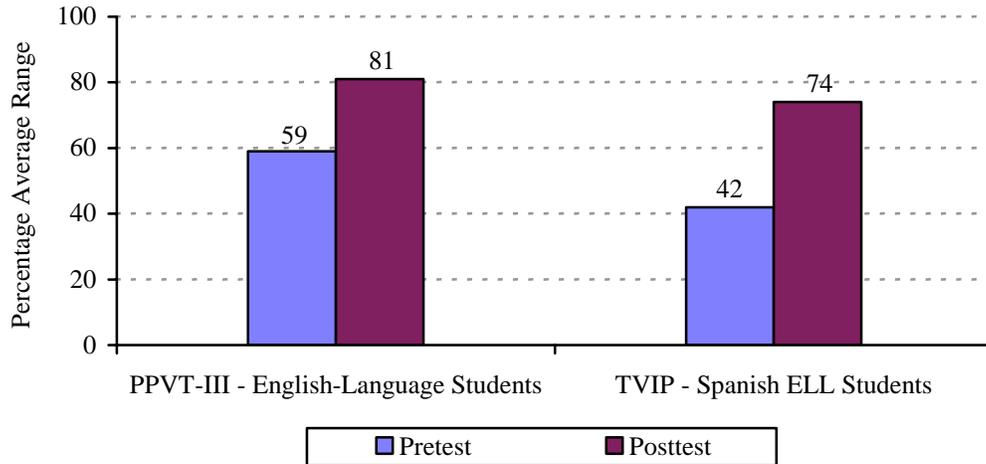
2006-2007 District Pre-K Test Results

A total of 1,718 (compared with 1,478 in 2005–2006) pre-K students had valid PPVT-III/TVIP pre- and posttest scores (754 in English only and 964 in English and Spanish). This sample size represents 37% of AISD pre-K students. Of the students tested, 280 were students at Read (83 in English only and 197 in English and Spanish). Results for Read are discussed in a later section about Read's first year. Findings from the 2006–2007 PPVT-III and TVIP district testing sample, including Read, are discussed in this section.

Students Scoring in the Average Range

It is important to know how prepared the pre-K students will be when they start kindergarten. Although 100 is the national average score, both the PPVT-III and the TVIP have an average range of 85–115 standard score points. The assumption is that students who advance to the average range in the test of their language of instruction will be ready to accelerate future literacy learning in kindergarten. At the posttest in April 2007, 77% ($n = 1,319$) of all students were in the average range on tests in their language of instruction (74% in Spanish and 81% in English). A 76% increase was noted from pretest to posttest in the number of Spanish ELL students in the average range, and a 37% increase was noted in the number of English-language students scoring in the average range. Figure 3 shows the percentages of pre-K students in the average range at the pretest and posttest during the 2006–2007 school year.

Figure 3: Percentages of Pre-K Students in the PPVT-III and TVIP Average Range at Pretest and Posttest, 2006–2007



Source: 2006–2007 DPE PPVT-III and TVIP data files

Results for English-Language Students

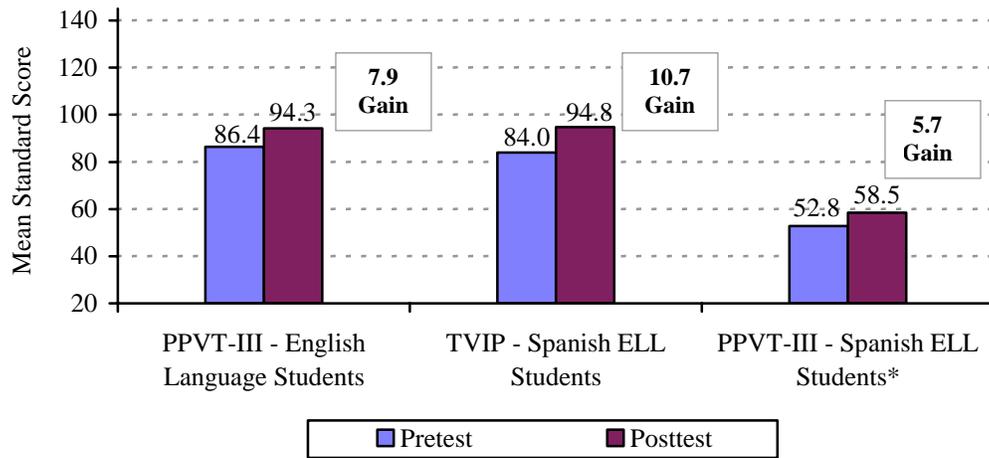
- Seventy-six percent of English-language students made gains on the PPVT-III from pretest to posttest.
- Average growth in receptive vocabulary on the PPVT-III for English-language students was 1 year, 2 months, which shows growth two times that expected for four-year-olds in a 7-month period.
- The average posttest standard score on the PPVT-III for English-language students was 94.3 (93.5 in 2005–2006), with a mean gain of 7.9 (6.5 in 2005–2006).

Results for Spanish ELL Students

- Seventy-eight percent of all Spanish ELL students made gains on the TVIP from pretest to posttest.
- Average growth for Spanish ELL students on the TVIP was 1 year, 2 months, which shows growth two times that expected for four-year-olds in a 7-month period.
- The average posttest standard score on the TVIP for Spanish ELL students tested was 94.8 (96.5 in 2005–2006), with a mean gain of 10.7 (11.4 in 2005–2006).
- The average posttest standard score on the PPVT-III for Spanish ELL students was 58.5 (61.3 in 2005–2006), with a mean gain of 5.7 (7.2 in 2005–2006).

Figure 4 shows the 2006–2007 average standard scores at pretest and posttest for pre-K students by language and type of test, as well as the average gain.

Figure 4: PPVT-III and TVIP Results for English-Language and Spanish ELL Students, 2006–2007



Source: 2006–2007 DPE PPVT-III and TVIP data files

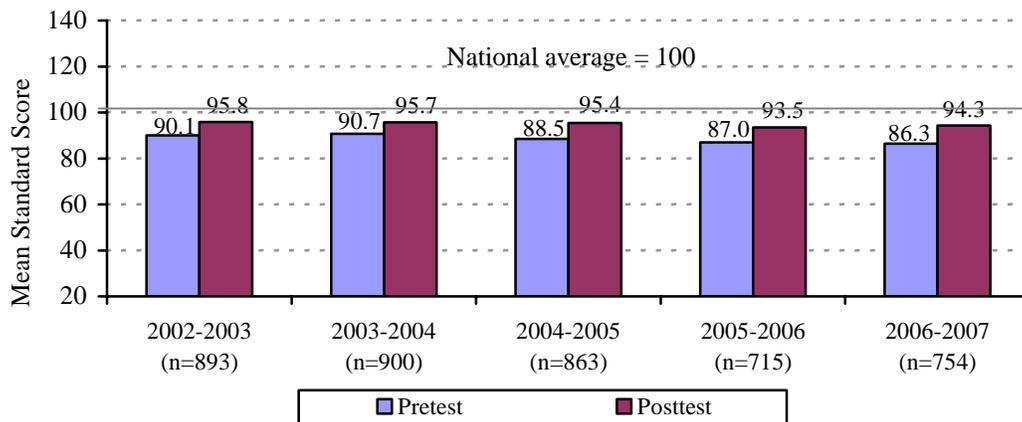
Note: This is baseline information because the PPVT-III is not normed for Spanish speakers.

DISTRICT 5-YEAR REVIEW OF PROGRESS IN LANGUAGE ARTS/PRE-READING

Five years of PPVT-III and TVIP data are presented in Figures 5, 6, and 7. Major findings for the testing sample include the following:

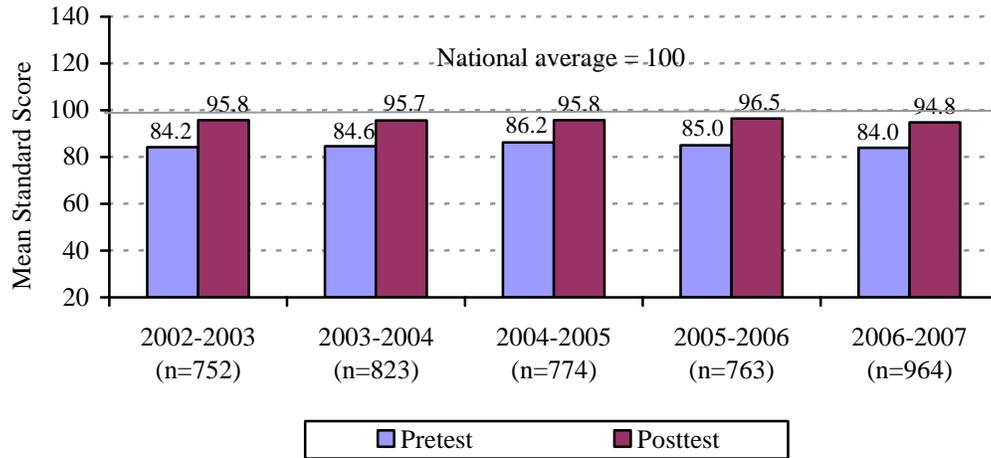
- After declining in 2005–2006, the PPVT-III posttest average for English-language students increased slightly from 93.5 in 2005–2006 to 94.3 in 2006–2007 (Figure 5).
- After increasing in 2005–2006 to the highest average score (96.5 points) since 2002–2003, the TVIP posttest average for the Spanish ELL students decreased to the lowest average of the 5-year period (94.8 points) in 2006–2007 (Figure 6).
- After maintaining a consistent 4-year average, the PPVT-III posttest average for Spanish ELL students decreased in 2006 (Figure 7).

Figure 5: Average Pretest and Posttest Scores for AISD English-Language Pre-K Students Tested on PPVT-III, 2002–2003 through 2006–2007



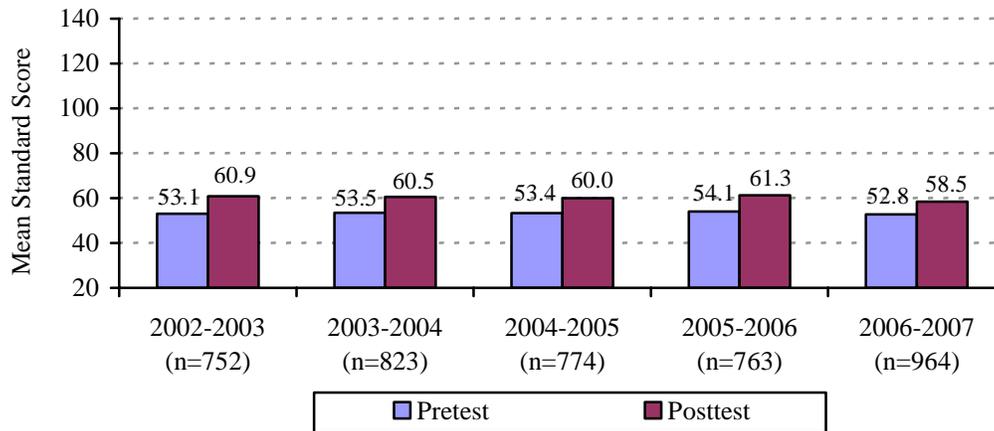
Source: DPE PPVT-III records, 2002–2003 through 2006–2007

Figure 6: Average Pretest and Posttest Scores for AISD Spanish ELL Pre-K Students Tested on TVIP, 2002–2003 through 2006–2007



Source: DPE TVIP records, 2002–2003 through 2006–2007

Figure 7: Average Pretest and Posttest Scores for AISD Spanish ELL Pre-K Students Tested on PPVT-III, 2002–2003 through 2006–2007

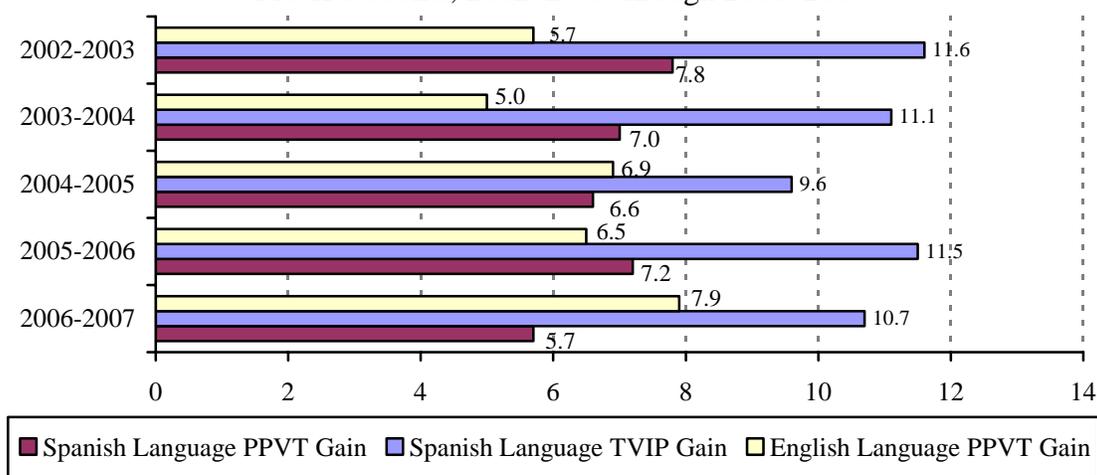


Source: DPE PPVT-III records, 2002–2003 through 2006–2007

Note: This is baseline information because the PPVT-III is not normed for Spanish speakers.

The average gains from pretest to posttest for pre-K students varied over the past 5 years. In every comparison of PPVT-III and TVIP results during that time, average gains were consistently 5 or more points. Each standard score point gain represents about 1 month of growth beyond what is expected for a child of that age. The average TVIP gains for Spanish ELL students (10.7 points) surpassed PPVT-III gains for English-language students (7.9) in 2006–2007, as in previous years. However, in 2006–2007, English-language students made their greatest average gain on the PPVT-III, compared with their gains for any of the other past 5 years (Figure 8).

Figure 8: Average Standard Score Gains on PPVT-III and TVIP for Pre-K Students, 2002–2003 through 2006–2007



Source: DPE PPVT-III/TVIP records, 2002–2003 through 2006–2007

Note: Any gain greater than zero indicates that student performance improved compared with the national average.

LONG-TERM IMPACT ON READING AND MATHEMATICS

A review of 2007 grade 3 TAKS reading and mathematics data for students who attended AISD pre-K in 2002–2003 provided information about the possible long-term impact of the pre-K program on reading and mathematics achievement. Sixty percent (n = 3,072) of the 2002–2003 pre-K cohort were enrolled in AISD in 2007 and took the grade 3 TAKS tests.

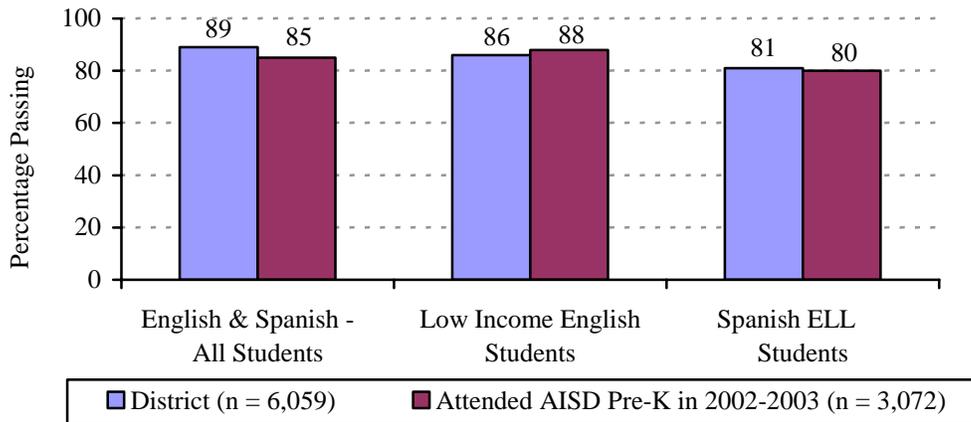
To provide comparisons of TAKS reading and mathematics passing percentages that would closely match the demographics of the students who attended pre-K (i.e., limited English or low income), the following groups and subgroups were analyzed:

- Overall results for all grade 3 students in AISD and grade 3 students who had attended AISD pre-K
- English TAKS results for low-income students in the district and low-income students who had attended pre-K
- Spanish TAKS results for Spanish ELL students in the district and Spanish ELL students who had attended pre-K

Results of the TAKS review provided the following insights (Figures 9 and 10):

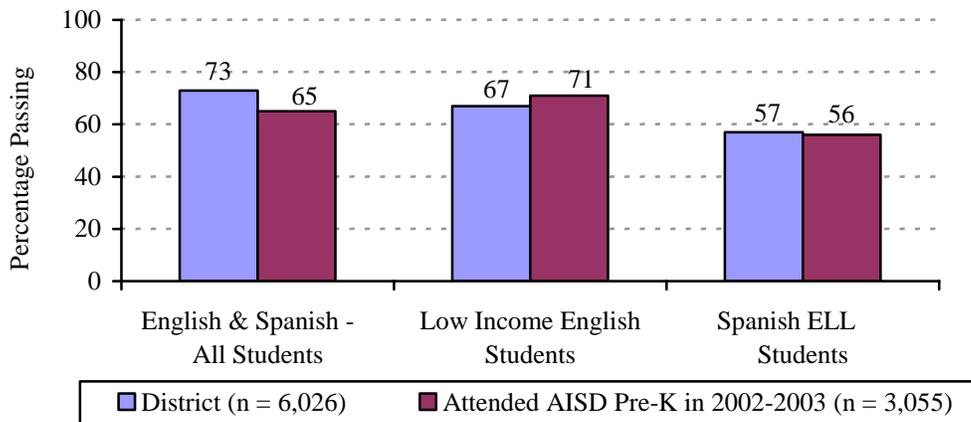
- Overall passing percentages were higher in reading and mathematics for the district (89% and 73%, respectively) than for the pre-K group (85% and 65%, respectively).
- Low-income grade 3 students who attended AISD pre-K and took the TAKS tests in English more often passed reading and mathematics (88% and 71%, respectively) than did district low-income English students (86% and 67%, respectively).
- Spanish ELL grade 3 students in both groups had similar passing percentages.

Figure 9: Percentage of Students Passing 2007 Grade 3 TAKS Reading for All AISD Students and for Students Who Attended AISD Pre-K in 2002–2003



Source: AISD SASI student records and 2007 TAKS reading data

Figure 10: Percentage of Students Passing 2007 Grade 3 TAKS Mathematics for All AISD Students and for Students Who Attended AISD Pre-K in 2002–2003



Source: AISD SASI student records and 2007 TAKS mathematics data

Although it is not possible to attribute these differences entirely to the attendance of pre-K for these students because other grades and teachers could have influenced their achievement, these results indicate that pre-K attendance in AISD may be positively associated with subsequent student achievement in reading and mathematics for low-income students who receive instruction in English.

COGNITIVE DEVELOPMENT IN OTHER AREAS

The *AISD Pre-K Report Card Assessment Rubrics* (AISD, 2006a), developed by AISD pre-K teachers and piloted in 2004–2005, was designed to provide consistency in scoring academic progress on the *Prekindergarten Report to Parents* each 9-week period in oral language, pre-reading/concepts of print, listening, writing, mathematics, science, social studies, ESL, and personal development. The various rubrics were aligned with the district IPGs (AISD, 2005); the state *Prekindergarten Curriculum Guidelines* (TEA, 1999); and the district-aligned PK-12 Matrix of Essential Knowledge and Skills.

The performance scale used for rating academic progress was as follows: 1 = needs improvement, 2 = basic understanding, 3 = skilled, and 4 = advanced. Being “on grade level” was defined by a score of 3 or 4. The skills evaluated became progressively more difficult each 9 weeks. After collecting feedback from teachers, the Pre-K Assessment Task Force implemented changes to improve the rigor on the rubrics used during the 2006–2007 school year. A phonemic awareness assessment was added to each 9-week reporting period. Academic rigor was increased for the advanced score of 4 as it applied to many student expectations, and was especially noticeable for student outcomes assessing concepts of print. In addition, the rubric for writing was more closely aligned to the stages of emergent writing (Mowry, 2006).

In 2006–2007, pre-K teachers were phased into electronic grade reporting using InteGrade Pro software as part of a districtwide initiative. The 2006–2007 report card data for approximately 1,500 pre-K students who were part of the electronic grade reporting for all 9 weeks were analyzed. Although the numbers of students in a content area were the same for all 9-week periods, the numbers of students varied by content areas. Science and social studies grades were averaged together as science/social studies/health on the report card. Fewer science and social studies (n = 1,197) grades were analyzed than were analyzed for other subject areas due to variations in teacher reporting.

In 2006–2007, the academic areas with the highest percentages of students on grade level at the end of the year were mathematics (90%) and social studies (88%). As in 2005–2006, the academic area with the lowest percentage of students on grade level was science (79%). Although progress was made by students who received an ESL score, only 52% of those students were on grade level in English at the end of the year. Table 2 shows that, with the exception of science, the largest percentages of students on grade level in each subject area occurred in the fourth 9-week period.

Table 2: Percentage of Pre-K Students on Grade Level in Each Content Area by 9-Week Period, 2006–2007

Content Area	Percentage of Pre-K Students on Grade Level			
	1 st 9 weeks	2 nd 9 weeks	3 rd 9 weeks	4 th 9 weeks
Oral language (n = 1,505)	79	84	82	87
Listening (n=1,494)	67	73	78	87
Concepts of print (n = 1,519)	53	74	74	84
Writing (n = 1,504)	51	63	72	81
Mathematics (n = 1,505)	60	79	85	90
Science (n = 1,197)*	50	69	83	79
Social studies (n = 1,197)*	41	67	86	88
ESL (n = 993)	21	29	42	52

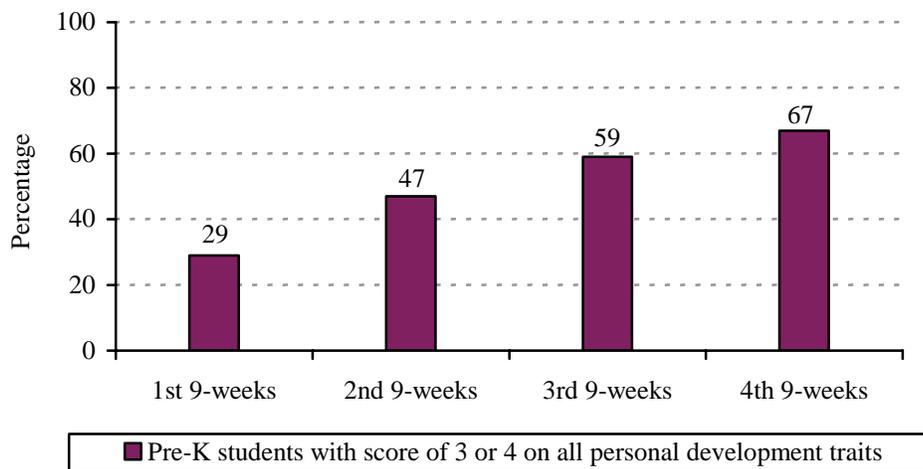
Source: InteGrade Pro grade reporting software data, as reported by pre-K teachers, 2006–2007

Note: Only students with separate science and social studies grades were included.

PERSONAL DEVELOPMENT

Social development for a four-year-old is also important for success in kindergarten. Personal development scores were analyzed for students ($n = 2,356$) with grades for each 9-week period. The performance scale used for rating progress in personal development was as follows: 1 = rarely, 2 = occasionally, 3 = frequently, and 4 = consistently. As with academic performance, a score of 3 or 4 indicated meeting expectations. Progress in 14 personal development goals was reported to parents each 9-week period. The goals included such traits as working with others, exhibiting fine and gross motor skills, following directions, accepting responsibility, and participating in class. Figure 11 shows that 29% of pre-K students in the sample received scores of 3 or 4 in all personal development traits at the end of the first 9-week period. By the end of the school year, 67% of the students met expectations for student behavior in all personal development traits.

Figure 11: Percentage of Pre-K Students Receiving a Score of 3 or 4 on All Personal Development Traits by 9-Week Period, 2006–2007



Source: InteGrade Pro grade reporting software data, as reported by pre-K teachers, 2006–2007

AISD PRE-K INITIATIVES

COMMUNITY PARTNERSHIPS

AISD has a long history of collaborating with the community. In the 2006–2007 school year, the AISD pre-K program participated in many innovative programs and partnerships to promote integration of services for pre-K students and their families. Community members, local non-profit agencies, and private daycare providers were involved in these initiatives.

- **Early Childhood Task Force:** On May 31, 2006, the AISD superintendent convened a committee comprised of 15 community members; faith-based, non-profit, and private child care representatives; and 9 AISD staff to discuss how best to serve the needs of AISD's youngest learners (AISD, 2006c). In December 2006,

the task force presented its recommendations in a final report to the AISD Board of Trustees (Bryant, Escame, & Ruiz, 2006).

- **Satellite campus:** AISD placed a pre-K teacher in a community preschool. Mt. Sinai Missionary Baptist Preschool served as a satellite campus for four-year-olds who qualified. This satellite teacher used the same curriculum as did AISD teachers to plan instruction. Six students participated in 2006–2007. Two satellite pre-K campuses will be in operation in 2007–2008.
- **Head Start (Child, Inc.):** Head Start provided instructional aides in 33 pre-K classrooms and visiting teachers in 45 classrooms during 2006–2007. A total of 832 low-income students qualified for instructional support and comprehensive health services.
- **Texas Early Education Model (TEEM):** TEEM is a state Center for Improving the Readiness of Children for Learning and Education (CIRCLE) program that integrates professional development activities and follow-up coaching for public school, child care, and Head Start. The AISD pre-K program has been participating in TEEM since 2003, and 22 pre-K teachers have participated in the training.
- **WorkSource:** The Greater Austin Area Workforce Board offered subsidized child care for eligible parents and training for child care providers. Funding to AISD allowed the hiring of an early childhood specialist to work with identified families and all collaborating child care providers.
- **AmeriCorps for Community Engagement and Education (ACEE):** AmeriCorps participants served AISD pre-K students for the first time at Read. Forty-two members attended literacy training and worked directly with students in small groups in the classrooms, library, and science laboratory.
- **Tuition-based expansion of Becker Elementary Pre-K:** A proposal to expand Becker Elementary School’s pre-K program to include tuition-paying students was developed by district staff, parents, and neighborhood representatives. This collaboration satisfied the neighborhood’s interest in retaining Becker as an elementary school and the district’s need to maximize resources and facility use.
- **Early Learning Opportunities Act (ELOA):** This grant, through United Way *Success by 6* (a joint partnership with AISD Family Resource Center), provided one-stop services for local area parents, as well as parent training sessions.
- **Reading is Fundamental (RIF):** RIF is a non-profit organization that promotes literacy by delivering free books and literacy resources to children and families at high-poverty AISD schools. This is a long-standing literacy collaborative in AISD.

CURRICULUM AND ACADEMIC INITIATIVES

To add more academic rigor to the program, AISD early childhood leaders provided pre-K teachers with opportunities to revise the pre-K assessment rubrics (AISD, 2006a) and attend pre-K-specific professional development activities to enhance classroom instruction and student learning. The 2006–2007 academic initiatives for pre-K are described here.

- **Instructional planning guides:** The state-adopted curriculum used in AISD pre-K classrooms is the *DLM Early Childhood Express* (Lara-Alecio & Irby, 2003), which is an integrated curriculum aligned to the state *Prekindergarten Curriculum Guidelines* (AISD, 1999). The AISD pre-K IPGs are aligned to the curriculum (AISD, 2005). The IPGs, written by early childhood educators, outline a sequence for instruction in each content area.
- **Assessment rubrics:** Pre-K teachers received training in use of the pre-K assessment rubrics, which provides ongoing assessment for reporting student progress on the *Prekindergarten Report to Parents* each 9-week period. The assessment rubrics, developed and refined by a team of pre-K teachers, provide consistency in assessment across the district.
- **Mathematics assessment:** In 2006–2007, pre-K teachers implemented a new mathematics assessment, *Assessing Math Concepts: Counting Objects* by Kathy Richardson (1999), one of the nation’s leading educators of elementary mathematics. The assessment helps teachers determine if children can count objects with consistency, accuracy, and confidence.
- **Inquiry-based science instruction:** Science exploration was a major initiative for pre-K teachers at all AISD schools in 2006–2007. Under the leadership of the AISD science department, teachers were trained to promote scientific literacy and inquiry-based science. At Read, pre-K students had access to a science learning laboratory once each week and teachers received extensive science training on their campus.
- **ESL instructional program:** Read ESL/bilingual teachers searched for a curriculum with explicit teaching of English vocabulary to ELL pre-K students. The teachers piloted the *Avenues: Vocabulary Builders*, a pre-K ESL curriculum by Hampton-Brown (2004), in spring 2007.

TEACHER SURVEYS: WHAT DO TEACHERS THINK?

In April 2007, pre-K teachers gave input about the effectiveness of the pre-K program through the online 2006-2007 *Prekindergarten Teacher Survey* (Curry, 2007). Specific topics included professional development opportunities, curriculum and materials, assessment rubric, electronic report card, and district support of the pre-K program. A separate teacher survey was sent to Read teachers, with some questions specific to the first year of the pre-K center. A total

of 202 pre-K teachers (27 from Read and 175 from other schools, or a response rate of 69%) responded to the teacher surveys. Teacher feedback was shared with program managers.

PROFESSIONAL DEVELOPMENT OPPORTUNITIES

Availability of pre-K-specific training is important to pre-K teachers. In 2006-2007, 167 (57%) pre-K teachers attended 2,970 hours of professional development activities directly related to pre-K instruction or classroom management (i.e., an average of 17.8 hours of completed professional development activities per teacher). In 2006–2007, 35 pre-K-specific professional development courses were available to pre-K teachers. Teachers who responded to the teacher survey found the following courses most beneficial:

- Exploring Science in the Pre-K Classroom (n = 81)
- Pre-K Mathematics TEXTEAMS (n = 81)
- Pre-K DLM Textbook System (n = 69)
- *Estrellita* Spanish Phonics Program for Bilingual Pre-K and Kindergarten Teachers (n = 68)
- Preschool Early Language and Literacy (n = 58)
- Prekindergarten Treehomes (n = 58)
- Preschool Early Language and Literacy Training (n = 58)

Teachers most often requested additional training opportunities in technology, behavior and classroom management, and writing.

STRENGTHS OF THE PRE-K PROGRAM

The 2006–2007 school year was one of great change for AISD teachers of young learners. In spite of the change, pre-K teachers experienced a sense of community and support from the AISD leadership. The opening of a new school that was specifically for pre-K students and that would pilot materials and practices to enhance teaching and learning added to confidence in the program and its objectives. Pre-K teachers at schools other than Read reported the following major program strengths.

Administrative/teacher support (n = 55). Teachers praised the early childhood specialists and staff for their leadership, expertise, and being “good advocates for young children.” Teachers also described a spirit of collegiality among pre-K teachers. One teacher explained, “I think that the pre-K teachers in this district really feel connected with one another. It is like being a part of a large extended family.”

Professional development (n = 33). Pre-K teachers believed that the pre-K-specific professional development activities for new and experienced teachers of young children were a strength of the program. As one teacher stated, there were “training workshops offered with more variety and depth, continuing the trend begun 2 to 3 years ago to help teachers keep up with research and better understand young children’s cognitive, social, and psychological

development.” Many of the professional development opportunities were presented by teachers who had participated in the TEEM project.

Rubrics/IPGs/electronic grade report (n = 33). The revised rubrics and their alignment to the IPGs were considered strengths of the 2006–2007 pre-K program. Respondents expressed strong agreement (i.e., from 79% to 82%) that the rubrics reflected an accurate assessment in the academic subject areas. According to one teacher, “The grading rubrics and assessments help me to focus my instruction to meet the district objectives.” Seventy-eight percent of the teachers who responded that they used the InteGrade Pro grade reporting software during its first year agreed or strongly agreed that the process went smoothly.

Materials/curriculum/resources (n = 31). The *DLM Early Childhood Express* curriculum (Lara-Alecio & Irby, 2003), available in English and Spanish, was a program strength according to teachers. The integrated curriculum includes pictures, books, Big Books, a mathematics resource book and CD ROM, and questions to initiate discussion.

Structure/focus of program (n = 32). The structure and focus were also reported to be strengths of the pre-K program. Teachers reported they were especially pleased that age-appropriate activities were intertwined with academics. High expectations for both academic and social skills were seen as important to the program structure. A teacher stated, “[We are] getting at-risk children into classrooms at an earlier age. It is a very effective early intervention tool.” Another teacher said, “I love that, as a grade level, we are so strong and focused on where we are going and what we are working towards.”

AREAS FOR IMPROVEMENT

Although teachers offered praise for the pre-K program, they also had suggestions for program improvements. According to pre-K teachers at schools other than Read, the following areas were most in need of improvement.

Materials/resources (n = 44). Although teachers agreed the curriculum had many good qualities, many expressed a need for more resources, including manipulatives, books, science materials, a phonics program, and library resources. Almost half of the teachers who responded to the teacher survey said limited opportunities existed for using technology in the classroom. Funds for field trips and for more classroom activities should be increased, according to many teachers, who said they spend much of their own money to buy materials for the classroom.

Class size (n = 36). Many teachers commented that the class size was too large to serve this population of four-year-olds, especially ELL students. Some pre-K teachers said they would like to have an aide when the enrollment reaches 20. According to one teacher, “I feel

that our class size is so important. Students benefit more with smaller classes. Having more than 16 four-year-olds is too much for one teacher.”

Parent involvement (n = 31). Teachers had many good ideas for involving parents more with their child’s education. Suggestions included better communication with parents, more informational meetings, training about how to help their students in school, and having translators available at all functions where parents are involved. Several teachers suggested that a mandatory parental involvement component for the pre-K program would be helpful. One teacher said it is important to get the parents involved “because their involvement, hopefully, will continue to grow as their children pass through elementary school.”

Professional development (n = 29). Many pre-K teachers expressed frustration that pre-K teachers cannot meet as a grade level during the year, especially at the beginning of the school year. Pre-K teachers met together in August 2003 to train with the new curriculum, and again in August 2005 to learn about the assessment rubrics. Pre-K teachers expressed a desire to meet together because often the professional development days do not pertain to early childhood. Instead, the method of disseminating information begins with a team leader meeting (i.e., four times per year), after which the team leader takes the information back to her/his campus. Other professional development needs, according to some teachers, include allowing teachers to observe in the classrooms of other pre-K teachers and to have more opportunities to share ideas with colleagues.

READ PRE-K CENTER: A NEW VISION FOR PRE-K

In fall 2006, Read opened its doors to more than 400 four-year-olds and 22 pre-K and 4 PPCD (Preschool Program for Children with Disabilities) teachers. The campus had a full staff, including principal, assistant principal, instructional coach, parent specialist, four teacher assistants, secretary, and attendance clerk. The administration and staff at Read were fully devoted to the physical, emotional, and cognitive development of four-year-olds. Pre-K students were transported by bus from their home schools of Cook, McBee, and Walnut Creek to the pre-K center to relieve overcrowding at those campuses.

PRE-K CENTER DESCRIPTION

The mission statement for Read was targeted toward the development of four-year-olds. The mission statement, as stated on the website (<http://www.austinisd.org>), includes these areas of focus:

- we believe that learning is developmental—each child learns at his/her own rate;
- all children have strengths and talents upon which to build;
- play is a vehicle for and indicator of children’s cognitive growth—play builds a foundation for abstract and symbolic academic learning; and
- diversity in the early childhood population is to be celebrated.

The pre-K center was organized in colonies, ranging in size from 4 to 6 classrooms and identified by a color (e.g., red, purple, green, and orange). The Read facility, which had been used in previous years as an elementary school, sixth grade center, and professional development facility, was remodeled to meet the needs of four-year-olds. The library, cafeteria, science laboratory, and indoor and outdoor play equipment were built specifically to meet the needs of young children.

CAMPUS INITIATIVES AND PARTNERSHIPS

Academic Initiatives

Because Read was a demonstration school for pre-K best practices, Read staff implemented some academic initiatives in the 2006–2007 school year.

- **Science focus:** Teachers focused on science through bimonthly staff development sessions with an AISD science department trainer. The goal was to develop scientific thinking among all students through weekly visits to the science laboratory. Students participated in hands-on activities using state of the art equipment.
- **Full-inclusion PPCD:** Highly qualified special education teachers and teacher assistants co-taught with AISD pre-K teachers. Four-year-olds with disabilities were mainstreamed with typically developing four-year-olds.
- **English language acquisition:** The Read bilingual and ESL teachers piloted the use of Hampton Brown's *Avenues-Vocabulary Builders* curriculum for pre-K students, to accelerate the acquisition of English for ELL students in the district. Bilingual/ESL teachers used the curriculum and participated in an evaluation of the curriculum (Gonzalez, 2007).

Community Partnerships

Read had a rich blend of community partnerships to benefit students and their families. In addition to the partnerships described earlier (e.g., RIF, Head Start, TEEM, Success by 6), Read had the following community collaboratives:

- **AmeriCorps:** Forty-two AmeriCorps participants served AISD pre-K students at Read. The training/work-study program was offered through University of Texas Charles Dana Center. In this first year of pre-K involvement, AmeriCorps participants spent between 8 and 14 hours each week receiving literacy training and working with students in small groups in the classrooms, library, and science laboratory at Read. Members worked with parents in education classes and participated in a Family Fun Night.
- **Parent involvement:** The parent support specialist provided strong parent support through education for parents (e.g., classes in ESL, nutrition, science, teaching

children to read) and services (e.g., health support and dental assistance).

Approximately 80 Read parents completed adult literacy courses during 2006–2007.

- **Community volunteers:** Professionals and retired persons from a community church served as greeters, decorated a parent room, provided snacks for staff meetings, provided new parents with a layette basket, and provided live music at breakfast on Fridays.
- **Dell, Inc.:** Dell employees at the Austin plant built bookshelves and planted a garden at Read.
- **IBM Corporation:** The Austin IBM donated 20 computers for Read classrooms.
- **Silverton Foundation:** In cooperation with KLRU, the Ready to Learn project provided family literacy workshops to promote child-learning and family reading.
- **Austin Children’s Museum grant:** Families from the Read pre-K community were invited to visit the Austin Children’s Museum in the fall and spring. Bus transportation was provided and admission was free.

LONGITUDINAL PRE-K STUDY

Because this was the first year for Read and for the revised pre-K assessment rubrics (AISD, 2006a), a longitudinal study was designed by DPE staff to examine the impact of the unique features of the demonstration campus, to connect students’ achievement of pre-K curricular objectives to later academic performance, and to provide additional formative feedback to the pre-K program managers (Malerba, 2006). To ensure the availability of a sample size for future analyses in early elementary years, students in all Read classrooms were tested with the PPVT-III, and the Spanish ELL students were tested with the TVIP. The following first year results for Read students and comparisons with other district pre-K programs are presented.

PPVT-III AND TVIP RESULTS FOR READ PRE-K STUDENTS

Overall Results

- Eighty percent of Read pre-K students who were tested made gains from pretest to posttest when tested in their language of instruction, compared with 76% for pre-K students from schools other than Read.
- Eighty-one percent of Read pre-K students were in the average range (85 to 115 standard score points) at the posttest when tested in their language of instruction, compared with 76% for pre-K students from schools other than Read (46% and 50%, respectively, at the pretest). The number of students scoring in the average range increased by 77% from pretest to posttest for Read and by 52% for pre-K students from schools other than Read.

Results for English-Language Students

- The average raw score on the PPVT-III for English-only Read students increased from 37.7 in the fall to 59.6 in the spring, compared with 43.6 and 59.9, respectively, for English-only students from schools other than Read. This increase reflects an average growth in receptive vocabulary of 1 year, 7 months in a 7-month period for English-only students from Read, compared with 1 year, 2 months for English-only students from schools other than Read.
- The average posttest standard score on the PPVT-III for English-language Read students was 94.3 (the same as the district average), with a mean gain of 13.3, relative to 7.2 for English-language students from schools other than Read. The average gain for English-language Read students on the PPVT-III was significantly higher ($p < .001$) than the average gain for English-language students from schools other than Read (see Figure 12).

Results for Spanish ELL Students

- The average raw score on the TVIP for Spanish ELL Read students increased from 18.4 in the fall to 34.6 in the spring, contrasted with 17.3 to 31.6, respectively, for Spanish ELL students from schools other than Read. This increase reflects an average growth in receptive vocabulary of 1 year, 4 months in a 7-month period for Spanish ELL students from Read, and of 1 year, 2 months for Spanish ELL students from schools other than Read.
- The average posttest standard score on the TVIP for Spanish ELL Read students tested was 97.9, compared with 93.9 for Spanish ELL students from schools other than Read, with a mean gain of 12.5 points, compared with 10.2 for Spanish ELL students from schools other than Read. The average gain for Spanish ELL Read students on the TVIP was significantly higher ($p < .01$) than the average gain for Spanish ELL students from schools other than Read (see Figure 13).
- The average posttest standard score on the PPVT-III for Spanish ELL students was 58.5 (the same as the district average), with a mean gain of 4.7, in contrast with an gain of 5.9 for Spanish ELL students from schools other than Read (see Figure 14). The PPVT-III scores for Spanish ELL students are baseline information only because the test was not normed for ELLs.

Figure 12: PPVT-III Pretest and Posttest Comparison for English-Language Pre-K Students, in District Testing Sample and at Read Pre-K Center, 2006-2007

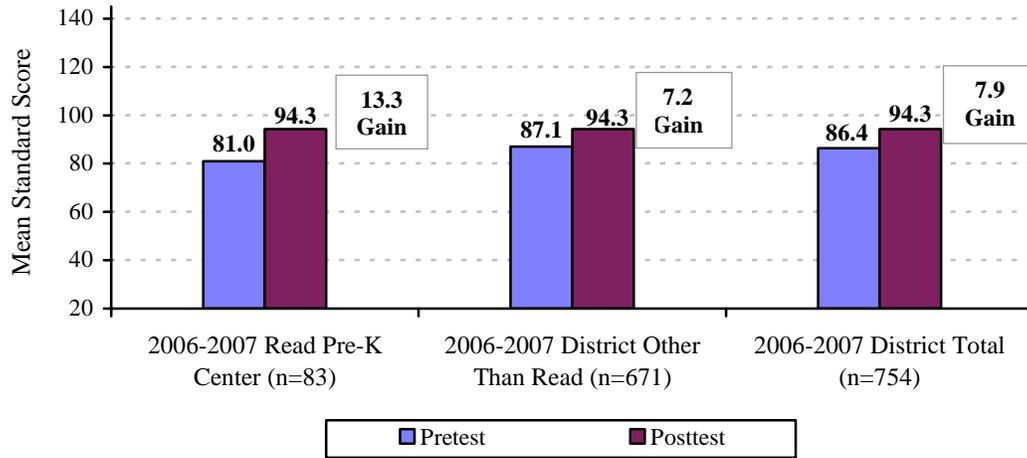


Figure 13: TVIP Pretest and Posttest Comparison for Spanish ELL Pre-K Students in the District Testing Sample and at Read Pre-K Center, 2006-2007

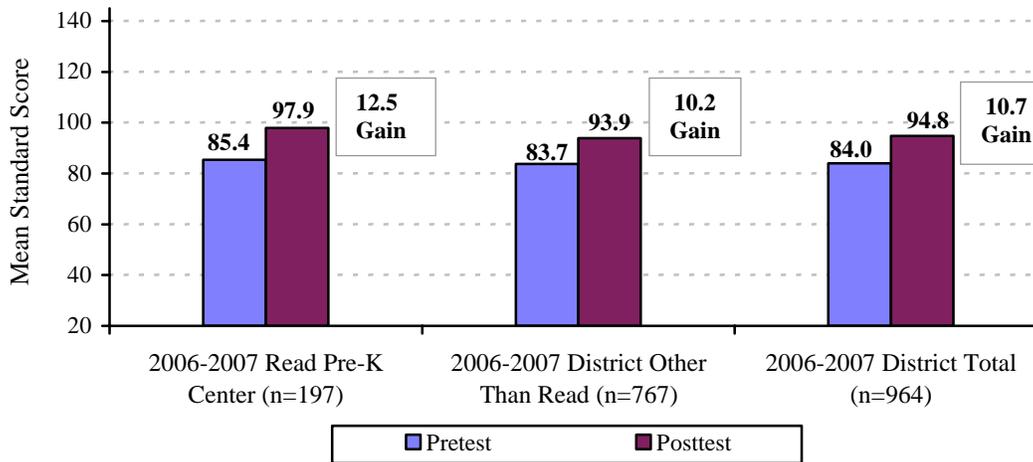
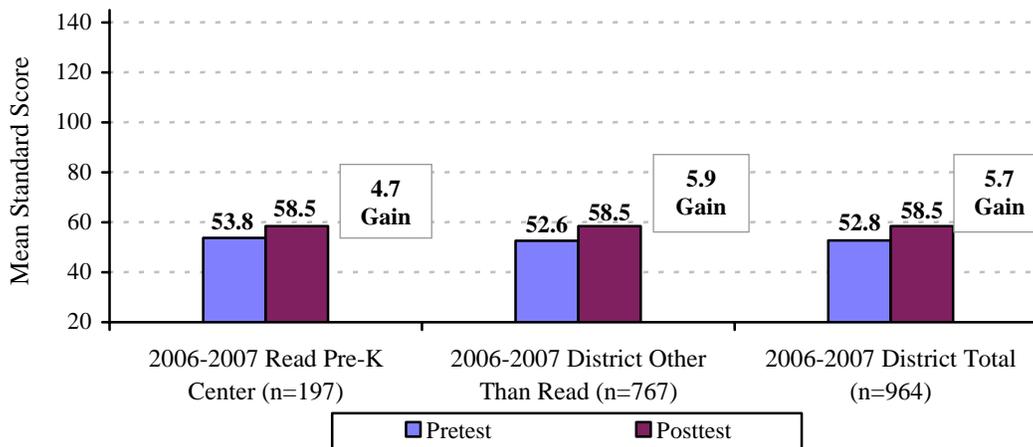


Figure 14: PPVT-III Results for Spanish ELL Pre-K Students in District Testing Sample and at Read, 2006-2007



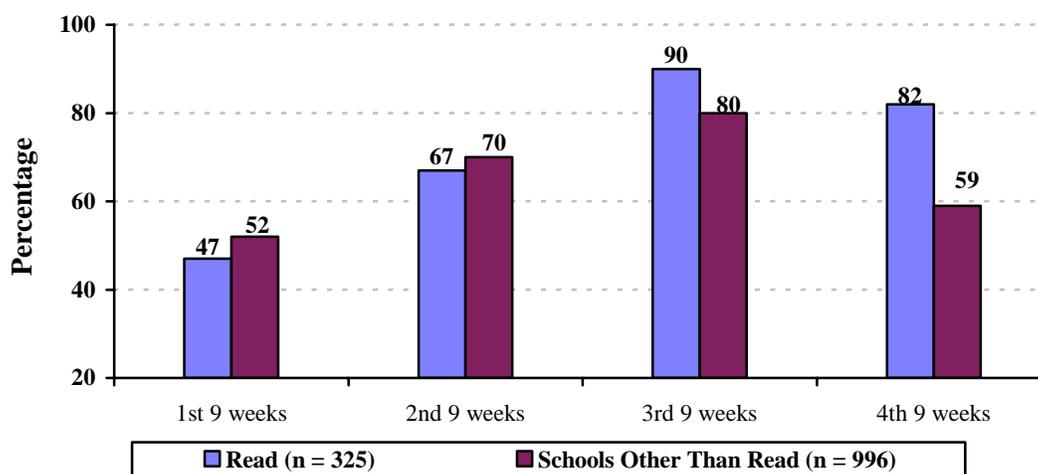
Source: DPE PPVT-III & TVIP 2006-2007 records

SCIENCE FOCUS

In the 2006–2007 school year, the AISD pre-K program focused additional resources on science training. Science department staff provided training for pre-K team leaders. At Read, teachers took students to a specially designed science laboratory once each week and received on-site training in science-based inquiry. AmeriCorps staff provided additional support in the science lab.

The science report card data were analyzed to see if there was a variation in the science grades between pre-K students at Read and students at other AISD schools. Figure 15 shows the percentages of Read and other pre-K students who were on grade level in science each 9-week period. During the first two 9-week periods, Read had lower percentages of students on grade level than did other schools. However, during the final two 9-week periods, the percentages of Read students on grade level in science surpassed those of pre-K students at other schools. The fourth 9-week period was particularly impressive for Read, with a 23 percentage point advantage over other pre-K programs with respect to being on grade level in science.

Figure 15: Percentage of Pre-K Students at Read and Other Schools on Grade Level in Science Each 9-Week Period, 2006–2007



Source: AISD InteGrade Pro electronic report card data for pre-K, 2006–2007

READ TEACHER SURVEY

Ninety-five percent (n = 21) of the Read teachers responded to the online *2006-2007 Prekindergarten Teacher Survey* (Curry, 2007) in April 2007. Some of the questions asked were specific to the first year at the demonstration school. One teacher summed up the atmosphere at Read this way:

I have had so much fun, and it has been wonderful having all the extras for our children. Our school is all about pre-K. We aren't being told to be quiet because testing

is going on or only getting 15 minutes in the library every other week. This was my first year to do inclusion, and I am so happy with the results and progress of the children.

Strengths of the Pre-K Program at Read

When asked to respond to statements about the Read campus, 100% of the teachers agreed or strongly agreed with the following statements:

- I have the necessary curriculum resources that I need to meet the academic needs of my pre-K students.
- The pre-kindergarten-specific training that I attended this year provided useful information that I use in my classroom.
- My prekindergarten team works together to plan and share ideas for an effective prekindergarten program.
- The principal and staff at my campus are supportive of a developmentally appropriate prekindergarten program.

According to Read teachers (n = 16), the greatest strength of the pre-K center was the early childhood focus for the entire campus. One Read teacher said the strength of the pre-K center “is that we can focus on the needs of our young students. Everything that we do is geared towards them, from playground equipment to the cafeteria tables to the curriculum in our classroom and science lab.”

Another strength mentioned by Read teachers (n = 11) was the presence of a supportive community and cooperative groups. According to one teacher, “The administration is great because they have experience teaching children at this level and can assist and support teachers.”

Challenges of the Pre-K Program at Read

The greatest challenge to teachers (n = 22) at Read was setting up the school as a pre-K center. Construction was still in progress when school began in August. Not only did the facility need to be set up, appropriate policies and procedures for a campus of young children were needed. Because students were not from the neighborhood, busing details had to be worked out during the first few weeks of school.

The two items on the teacher survey that received the least agreement in the survey were the following statements about class size and student attendance:

- My class size has stayed at or below the recommended number of 18 students most of the year (28% disagreed or strongly disagreed).
- Attendance at the Read Pre-K Center has been unaffected by the need for students to ride a bus to school (24% disagreed or strongly disagreed).

Suggestions for Improvement of the Pre-K Program at Read

The only suggestions for improving the pre-K program at Read referred to class size (n = 5) or to school organization (n = 11). One teacher indicated that Read teachers needed more time “to talk and share information and ideas.” Another teacher suggested that teachers would have more time if students were bused directly from their homes rather than from the home campus.

The bilingual classes at Read were larger than the ESL classes. One teacher suggested that “the pre-K bilingual classes have needs that can be solved by having no more than 18 students and a bilingual nurse.” Another teacher stated, “It’s difficult to give added attention as numbers rise.”

SUMMARY

AISD is dedicated to improving early learning for disadvantaged four-year-olds. The full-day program provides a highly qualified teacher for each pre-K classroom. In addition to state guidelines and curriculum resources, AISD pre-K teachers have IPGs (AISD, 2005) and the revised pre-K *Assessment Rubrics* (AISD, 2006a) as tools to help prepare their students for kindergarten. Prekindergarten-specific professional development opportunities are available to all pre-K teachers.

Although AISD has participated in community partnerships (e.g., Head Start, TEEM) in the past, the current emphasis from the state is integration of services to provide high quality, cost-effective child care for pre-K students. New to AISD in the 2006–2007 school year was the placing of a certified pre-K teacher at a satellite campus to offer high quality instruction. In 2007–2008, the district will place two pre-K teachers in satellite campuses.

Despite the national debate about what is developmentally appropriate for four-year-olds, it is agreed that students who come to school with a deficiency in experiences or in language need to accelerate their learning during pre-K to be ready for kindergarten. AISD pre-K student gains on the PPVT-III and TVIP in 2006–2007 reflect the acceleration occurring in students’ receptive vocabulary during pre-K. The gains for English-language students on the PPVT-III and for Spanish-language students on the TVIP indicate that students showed a rate of growth two times the rate that would be expected for four-year-olds in a 7-month period of instruction. In addition, 77% of the pre-K students tested were in the average range at the posttest when tested in their language of instruction.

The revised pre-K assessment rubrics (AISD, 2006a) have been helpful tools for teachers to evaluate the academic progress of pre-K students. The content areas of mathematics and social studies had the highest percentages of students on grade level at the end of the year (90% and 88%, respectively). As in 2005–2006, the academic area with the lowest percentage of students on grade level was science (79%). Although progress was made by students who

received an ESL score, only 52% of those students were on grade level in English at the end of the year.

Also important to readiness for kindergarten is social development. The growth in personal development was evident in the increase in the percentages of students meeting expectations on all traits from 29% at the end of the first 9-week period to 67% at the end of the school year.

An analysis of 2007 TAKS reading and mathematics data at grade 3 for a cohort of students who attended pre-K in 2002–2003 indicates that those students who attended pre-K, especially English-language low-income students, had TAKS reading and mathematics passing rates above district passing rates for low-income students.

In its first year of operation, the Read Prekindergarten Demonstration School has shown promise. Gains on the PPVT-III and TVIP for Read students were significantly higher than for students at other AISD schools with pre-K, when tested in language of instruction. The science focus at the school resulted in a higher percentage of Read students being on grade level (82%), compared with pre-K students at other schools (59%), at the end of the school year. This will be baseline data. A longitudinal study of the 2006–2007 Read pre-K class will track later years of learning in early elementary school to provide effectiveness feedback to the pre-K program.

RECOMMENDATIONS

As state and national expectations become more rigorous, the educators of young children face many challenges. The district should continue to implement developmentally appropriate practices for pre-K, while supporting the academic rigor required for these four-year-olds to be reading on grade level by grade 3 and thereafter.

The superintendent's Task Force on Early Childhood Education has recommended goals to help guide the district in expanding community partnerships and enhancing learning opportunities for all eligible four-year-olds in AISD (AISD, 2006c). The district should work with the task force, early childhood specialists, and the community to implement the recommendations. The following additional recommendations for continued support to the pre-K program are offered to AISD decision makers:

- Support English language acquisition for bilingual and ESL students by providing professional development opportunities for pre-K teachers who will be using the *Hampton-Brown Avenues-Vocabulary Builders* (2004) curriculum in 2007–2008.
- Continue to seek meaningful partnerships with the community to improve educational opportunities for disadvantaged four-year-olds.
- Continue to provide high quality staff development opportunities to all pre-K teachers that will help them accelerate learning for their students and provide them with opportunities to observe and share teaching strategies with colleagues.

- Support Read as a demonstration site to develop best practices and innovative strategies that can be replicated in other schools in the district.

APPENDICES

**APPENDIX A: 2006–2007 AISD PREKINDERGARTEN PROGRAMS;
NUMBER OF STUDENTS AND CAMPUS FUNDING**

Schools with Pre-K Program	Number of Pre-K Students Served	Title I Elementary School	Pre-K Expansion Grant Funding*
Allan	57	x	x
Allison	75	x	x
Andrews	106	x	x
Barrington	123	x	x
Becker	39	x	x
Blackshear	52	x	x
Blanton	85	x	
Boone	37		
Brentwood	43		x
Brooke	58	x	x
Brown	84	x	x
Campbell	55	x	x
Casey	85	x	x
Casis	13		
Cowan	28		
Cunningham	44	x	x
Davis	51		
Dawson	44	x	x
Doss	27		
Galindo	114	x	x
Govalle	62	x	x
Graham	123	x	x
Harris	136	x	x
Hart	158	x	
Hill	18		
Houston	143	x	x
Jordan	118	x	x
Joslin	53	x	
Kocurek	54	x	x
Langford	146	x	x
Linder	163	x	x
Maplewood	35	x	x
Mathews	56	x	x
Menchaca	82		x
Metz	116	x	x
Mills	35		
Norman	97	x	x

Schools with Pre-K Program	Number of Pre-K Students Served	Title I Elementary School	Pre-K Expansion Grant Funding*
Oak Hill	49		x
Oak Springs	52	x	x
Odom	123	x	
Ortega	44	x	x
Palm	79	x	x
Patton	50		
Pecan Springs	109	x	x
Perez	105	x	
Pickle	102	x	x
Pillow	74	x	
Pleasant Hill	88	x	
Read Pre-K Center	421		
Reilly	44	x	x
Ridgetop	35	x	x
Rodriguez	148	x	
St. Elmo	89	x	
Sanchez	107	x	x
Sims	58	x	x
Summitt	35		x
Sunset Valley	69	x	x
Travis Heights	62	x	x
Walnut Creek	37	x	x
Widen	112	x	x
Williams	71	x	
Winn	105	x	x
Wooldridge	170	x	x
Wooten	116	x	x
Zavala	56	x	x
Zilker	29		x
Total (66 schools)	5,454	52	47*

Source: AISD program evaluation pre-K student records, 2006–2007

* Forty-seven schools were part of the Prekindergarten Expansion Grant as of 2001–2002. The additional schools that moved to full-day programs after 2002–2003 were not part of the grant. Local and federal funds are used to supplement the pre-K budget.

Note: Elementary schools without pre-K programs in 2006–2007 were Baranoff, Barton Hills, Bryker Woods, Clayton, Cook, Gullett, Highland Park, Kiker, Lee, McBee, and Pease.

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